



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>







2

5071

1143

1902







BIBLIOGRAPHY OF UNITED STATES PUBLIC DOCUMENTS

Department List No. 1.

LIST OF PUBLICATIONS

OF THE

AGRICULTURE DEPARTMENT

1862-1902

WITH ANALYTICAL INDEX

Prepared in the Office of the

U. S. SUPERINTENDENT OF DOCUMENTS

GOVERNMENT PRINTING OFFICE

WASHINGTON

GOVERNMENT PRINTING OFFICE

1904





Transfer to  
New Lib. Stacks  
9-21-48

## CONTENTS

	Page
Introduction .....	5
Preface .....	7
Classification explained.....	8
Tables .....	19
Index to the tables .....	137
Appendix.....	615

## ABBREVIATIONS

(Circ.).....Single-sheet publication, unnumbered.	S. mis. doc.....Senate miscellaneous document.
Cong.....Congress.	Serial no.....Serial numbers first assigned to
c. t. o.....Cover title only.	bound volumes of Congressional
D. C.....District of Columbia.	documents in Document Check-
ed.....Edition.	list, 2d ed., 1895, and continued
H. ex. doc.....House executive document.	in document indexes of 55th
H. mis. doc.....House miscellaneous document.	and subsequent Congresses.
l.....Leaf, leaves.	sess.....Session.
n. d.....No date.	U. S.....United States.
n. p.....No place.	v.....Volume, volumes.
n. t. p.....No title-page.	f°.....Folio.
p., pp.....Page, pages.	4°.....Quarto.
pt., pts.....Part, parts.	8°.....Octavo.
pl.....Plate, plates.	12°.....Twelvemo.
por.....Portrait.	16°.....Sixteenmo.
rev.....Revised.	24°.....Twenty-fourmo.
S. ex. doc.....Senate executive document.	32°.....Thirty-twomo.



## INTRODUCTION

This List of Publications of the Agriculture Department, 1862–1902, with analytical index, is the first of the series of contributions toward a Bibliography of United States public documents, which will deal with the publications of all the Executive Departments and other independent publishing offices of the Government. Separate lists of the publications of each of these Departments and offices will be issued from time to time as completed, and will be supplied to State and Territorial libraries, designated depositories, and other libraries as far as the limited edition will admit. Librarians are invited to point out errors and to make suggestions for consideration prior to the consolidation of the complete work.

I desire to express my sincere thanks for the assistance rendered by Mr. George William Hill, Chief of the Publications Division, and Mr. Robert B. Handy, assistant in charge of the document section, Agriculture Department.

L. C. FERRELL,  
*Superintendent of Documents.*

OCTOBER 13, 1903.



## PREFACE

Though next to the youngest of the Executive Departments of the United States Government, and its work having been for years impeded by lack of interest on the part of Congress, the publications of the Agriculture Department rank second to none in number and usefulness.

From a doubtful experiment, with an annual report as its only publication, the Department has developed into a great publishing office, the output of which is eagerly sought by those engaged in agricultural inquiry.

The constant changes in the personnel of the various divisions composing the Department, the growing need and gradual extension of investigations, necessitated in a degree, and at least satisfactorily explain, the otherwise incomprehensible peculiarities and confused methods which characterize the publications of the various bureaus and offices and of the Department as a whole.

### FORMER LISTS.

As early as 1867 a general index was made to the annual reports from 1862 to that date (A1.1:867, p. 473), and a still more elaborate index, 1837-1876 (including the agricultural reports made through the Patent Office from 1837-1861), was issued in 1879 (A1.8:14), with a supplement bringing the work down to 1885, printed in 1886 (A1.8:42); but it was not until 1894 that a list of the miscellaneous publications appeared (A1.8:55), and that included only the publications for the five years from 1889 to 1893, being simply a consolidated reprint of the lists which had been a feature of the annual reports of the Secretary for those years.

In 1896 another index to the annual reports, 1837-1893, was printed (A21.3:1), in the preface to which the former attempts to index the reports are characterized as "so unsatisfactory for the purpose for which they were designed as to have fallen into almost complete dis-

use." While it is not doubted that this index was of great service, it still left the problem of the miscellaneous publications unsolved, and it was therefore gratifying when, toward the latter end of the same year, the first list including these publications was issued.

This checklist, including all the publications from 1841 to June 30, 1895 (A17.3:9), and giving a decimal classification for the convenience of those who wished to "keep their files of Government publications apart from their general collection of books," served to emphasize the necessity for a complete catalogue of the publications therein enumerated, and formed a working basis in collecting the set of publications of the Agriculture Department in the library of the office of the Superintendent of Documents, which is now the most complete set of such publications in existence.

In 1898 an author index to all the publications of the Department, 1841-1897, was printed (A21.3:4). Much valuable information was necessarily omitted from this work on account of the limitations of a strictly "author index," which debarred some important publications that failed to bear their authors' names.

The latest attempt to supply the much-needed reference list was a "List by titles from 1840 to June, 1901," issued in 1902 (A21.3:6). It was but an elaboration of the checklist of 1896, and while more complete, presented the matter in an equally awkward form for quick reference use.

It is hoped that the present list, combining both methods used by its predecessors, the checklist and the index forms, will prove a satisfactory reference work and lead the searcher quickly to the desired publication.

#### CLASSIFICATION EXPLAINED.

With the establishment of the office of the Superintendent of Documents, by the provisions of the printing act of January 12, 1895, a new era in the history of public documents was inaugurated. Not only did the office at once undertake the tasks of cataloguing and indexing imposed upon it by law, but in its establishment as a great clearing house for the publications of the Government it became necessary to keep a file of the publications for reference use. In the beginning no definite idea could be formed of the extent of such a collection, and no one dreamed of the magnitude of the work undertaken when it was decided to collect and classify a library strictly governmental in character.

As it was seen to be impossible to arrange such a large and uncertain collection of special publications by either the "decimal" or "expansive" system of library classification in general use, a governmental author arrangement was adopted, corresponding in the main

to the classification applied by Miss Adelaide R. Hasse to the publications of the Agriculture Department in a list issued by the Department in 1895.

It was soon found that this classification, however adequate for a single Department, was not capable of meeting the needs of a great library of Government literature, and a new classification became a necessity.

It was no simple matter to devise a system of classification elastic enough to meet the needs of such a mass of unrelated matter as necessarily forms a library of United States public documents, nor to foresee, though aided by the fruits of the former experience, the many inconsistencies and incongruities against which to guard. Decimal, alphabetical, numerical, chronological, author, subject, and serial methods of classification were experimented with, until at last the present system, a combination of various schemes, was decided upon as the most simple and usable, and its application to the Library has proven satisfactory in every way.

But if the task of applying an acceptable system to the books was hard, that of explaining it concisely and lucidly is certainly more difficult. In giving the following explanation of the method of classification for United States public documents, as it is now used in the Public Documents Library, which contains the largest collection of such publications, the hope is entertained that many of the large libraries may be led to use the scheme, thus insuring uniformity of classification, and making the lists of the various Departments, of which this work is the first, a direct index to the publications on their shelves.

The classification is by governmental authors: First, by Departments or independent publishing offices; second, by bureaus, offices, or divisions of such Departments or independent publishing offices.

#### *Department symbol.*

The first letter of the distinctive word in the title of each of the nine Executive Departments is used to designate the Department, and is written as the first term in the "classification number," as follows:

A = Agriculture Department.

C = Commerce and Labor Department.

I = Interior Department.

J = Justice Department.

N = Navy Department.

P = Post-Office Department.

S = State Department.

T = Treasury Department.

W = War Department.



In order that no conflict should arise between the Executive Departments notation and that of any of the independent publishing offices, two letters are used in all other notations, as follows:

CS = Civil Service Commission.

DC = District of Columbia.

FC = Fish Commission.

FS = Freedman's Savings and Trust Company.

GN = Geographic Names Board.

GP = Government Printing Office.

IC = Interstate Commerce Commission.

Ju = Judiciary (United States courts, etc.).

La = Labor Department.

LC = Library of Congress.

NA = National Academy of Sciences.

NH = National Home for Disabled Volunteer Soldiers.

Pr = President of United States.

SI = Smithsonian Institution.

These two lists give the complete letter symbols, and the arrangement on the shelves is strictly alphabetical taking them as a whole. Of course, the publications of the Fish Commission and the Labor Department have since the 1st day of July, 1903, been classified among the publications of the Commerce and Labor Department, of which they are now bureaus, but their publications as separate publishing offices are left under the old classification.

*Bureau, office, or division symbol.*

A symbol having been supplied for the Departments and independent publishing offices, one for each of the bureaus, offices, and divisions of such Departments or publishing offices was next considered.

The figure 1 following the Department or independent publishing office symbol was fixed upon to represent the Secretary of the Department or the chief executive officer of any of the independent publishing offices, and is always used for such, thus—

A1 = Agriculture Department, Secretary's office.

W1 = War Department, Secretary's office.

GP1 = Government Printing Office, Public Printer's office.

Beginning with figure 2, the numbers are applied in numerical order to the various publishing bureaus, offices, and divisions, these having been arranged alphabetically when the classification was applied; new offices to be added at the end of the list of a Department and assigned the next number.

This of course does not provide for an alphabetical arrangement of the bureaus, offices, etc., in the future, but does furnish a distinctive symbol for each without limit.

A point is placed after this second symbol to separate the Department and bureau notation from the rest of the "classification number."

Examples:

A1. = Agriculture Department, Secretary's Office.

A2. = Agriculture Department, Accounts and Disbursements Division.

A3. = Agriculture Department, Agrostology Division.

A4. = Agriculture Department, Animal Industry Bureau.

T1. = Treasury Department, Secretary's Office.

T2. = Treasury Department, Appointments Division.

T3. = Treasury Department, Auditor for Treasury Department (First Auditor.)

T4. = Treasury Department, Auditor for War Department (Second Auditor.)

### *Series symbol.*

Next to be considered was a symbol for the numerous series of publications which emanate from these various publishing offices. As substantially every Government publishing office issues an annual report, this annual report is considered to be the most important series in the publications of every office, and figure 1 was therefore designated as the symbol for "annual reports," and written as the third term in a "classification number," following the point.

In like manner an arbitrary symbol, figure 2, is assigned to the numerous publications of a miscellaneous character which are not numbered or volumed in any series. Such sporadic issues have been called "general publications," and their symbol, figure 2, is written as the third term in a "classification number".

A majority of the publishing offices issue their publications numbered in series called "bulletins" or "circulars" or both; the terms being applied without any regularity as to size or character of the works thus numbered. The figure 3 for "bulletins" and the figure 4 for "circulars" have been permanently assigned to these classes, to be written as the third term in a "classification number."

We now have figures 1, 2, 3, and 4, when written after the point as the third term in a "classification number," permanently assigned as symbols, as follows:

.1 = Annual reports.

.2 = General publications.

.3 = Bulletins.

.4 = Circulars.

From this point the various series are arranged alphabetically as far as possible, assigned the numbers following indefinitely, and all

new series as they come to hand are given the next number to be applied to a series, under the office from which they emanate.

Should an office fail to issue any of the four classes of publications here described, the numbers are left blank, and the numbering of such series as they may issue begins with figure 5.

Following the series symbol a colon is used to separate the series figure or figures from the characters used as individual "book numbers" to follow.

**Examples:**

A1. = Agriculture Department, Secretary's Office.

A1.1: = Agriculture Department, Secretary's Office, annual reports.

A1.2: = Agriculture Department, Secretary's Office, general publications.

A1.3: = Agriculture Department, Secretary's Office, bulletins.

A1.4: = Agriculture Department, Secretary's Office, circulars.

A1.5: = Agriculture Department, Secretary's Office, miscellaneous circulars.

A1.6: = Agriculture Department, Secretary's Office, special reports.

N6. = Navy Department, Hydrographic Office.

N6.1: = Navy Department, Hydrographic Office, annual reports.

N6.2: = Navy Department, Hydrographic Office, general publications.

N6.3: = Navy Department, Hydrographic Office, bulletins.

N6.4: = Navy Department, Hydrographic Office, circulars.

N6.5: = Navy Department, Hydrographic Office, catalogues and lists.

N6.6: = Navy Department, Hydrographic Office, corrections and additions.

N6.7: = Navy Department, Hydrographic Office [practical papers].

*Book number.*

An individual "book number" is all that is now needed to complete the classification. The symbols for this purpose are written after the colon as the fourth term in the "classification number." In the case of annual or periodical publications the date is used as the book number; for a volumed series the volume number is used, and in a numbered series the number. The works classified as "general publications" being without any of these distinctive features, it is found advisable to arrange them in alphabetical order under the most significant words of their titles, or under their subjects, and the Cutter Author Table symbols for such words are used as "book numbers."

**Examples:**

- A1.1:901 = Agriculture Dept., Secy's Office, annual report, 1901.  
A1.1:902 = Same, 1902.  
A1.2: = Agriculture Dept., Secy's Office, general publications.  
A1.2:An4 = Angora. Notice of receipt of letter from Minister Terrell, relating to agriculture in Angora. November 1, 1893. (Circ.)  
A1.2:L48 = Leave of absence not allowed to employees outside of Washington. October 21, 1896. (Circ.)  
N6.8: = Navy Department, Hydrographic Office, publications (numbered).  
N6.8:3 = [No. 3.] List of reported dangers to navigation in Pacific Ocean, whose positions are doubtful, or not found on charts in general use. 1866. 191 pp.  
N6.8:40 = No. 40. Steam lanes across Atlantic; [by M. F. Maury.] 1872. 19 pp. 3 pl.  
T14.5: = Treasury Department, Second Comptroller, decisions, digest of.  
T14.5:1 = Volume 1. Compiled by George Chipman. 1852.  
T14.5:2 = Volume 2, 1869-1884; compiled by R. J. Mitchell. 1885. 433 pp.

*Superior letters and figures.*

Two other very useful features of the classification need some explanation, namely, the use of the superior letter a (<sup>a</sup>), and the superior figures (<sup>1-9</sup>).

The superior letter always designates excerpts from the publication bearing the same notation without the (<sup>a</sup>). The name adopted for these excerpts is "separates," and they are always designated by the superior (<sup>a</sup>). These "separates" are arranged in classes by themselves, immediately following the series from which they are taken. In cases where the separates are from an annual report series it has often been found necessary to make two classes. The personal report of the chief, which usually appears in pamphlet form without the accompanying documents, is arranged and book-numbered by dates. The other class, scientific reports accompanying the report of the chief, is arranged alphabetically on the same plan as the "general publications."

**Examples:**

- A1.1:901 = Agriculture Department, Secretary's Office, annual report, 1901.  
A1.1<sup>a</sup>:901 = Agriculture Department, Secretary's Office, annual report, 1901 (separate).

**Examples—Continued.**

N14.5:885 = Navy Department, Naval Observatory, Astronomical and Meteorological Observations, 1885.

N14.5<sup>a</sup>:As8 = Same (separate). Astrophotographic Congress, International, etc.; by A. G. Winterhalter. 1889. (Reprint of Appendix 1, Astronomical and Meteorological Observations, 1885.)

The superior figures are used to differentiate between two publications which may of necessity be assigned the same symbol in the alphabetical classification, and also to distinguish between the various editions of the same serial or numbered publication.

**Examples:**

A1.2: = Agriculture Dept., Secy's Office, general publications.

A1.2:Ag8<sup>1</sup> = Agricultural colleges. List of delegates and visitors to tenth annual convention of Association of American Agricultural Colleges and Experiment Stations, 1896. n. t. p. 3 pp.

A1.2:Ag8<sup>a</sup> = Agriculture Department. [Letter as to work and needs of Department of Agriculture; by William G. Le Duc.] February 27, 1880. n. t. p. 15 pp.

I16.5: = Interior Department, Education Bureau, Circulars of Information.

I16.5:875<sup>1</sup> = 1875, No. 1. Proceedings of Department of Superintendence of National Educational Association, Washington, D. C., January 27 and 28, 1875. 1875. 114 pp. 1 pl.

I16.5:875<sup>a</sup> = 1875, No. 2. Education in Japan; [by William E. Griffis and David Murray.] 1875. 64 pp.

N6.8: = Navy Department, Hydrographic Office, publications (numbered).

N6.8:90<sup>1</sup> = No. 90. Development of great circle sailing; by G. W. Littlehales. 1889. 53 pp. 5 pl. 1 map.

N6.8:90<sup>a</sup> = Same, 2d ed. 1889. 63 pp. 7 pl. 2 maps.

It will be seen that the system here presented is expansive enough to cover any number of departments, offices, series, or books, and that, too, in as concise a form as possible. A long or intricate classification number is not only hard to apply to a book, but it is difficult to remember in consulting the shelves, and it should therefore be as short and simple as possible. Certainly the numbers or symbols in the method herein described express a great deal in a limited space, and it is hard to conceive of a shorter method of expressing such a phrase as "Interior Department, Geological and Geographical Survey

of the Territories (Hayden), Final reports, Volume 9," than by the accurate notation I18.5:9, which, when analyzed, exhibits a clear statement of the entire phrase: (I) Interior Department; (18) Geological and Geographical Survey of the Territories (Hayden); (.5) Final reports; (:9) Volume 9:=I18.5:9.

#### THE TABLES.

The Tables in this work are elaborated from the card shelf list used in this Library. All the necessary bibliographical information is appended to the entry of a publication or series, and no time or effort has been spared in the attempt to make these Tables present an accurate and complete list of all the publications of the Department from 1862, including all 1902 imprints.

When a publication was also issued as a Congressional document the Congressional reference is inserted after the entry for such publication in the Tables. In a few instances a single paper in a volume has been so issued, and in those cases it has been necessary to insert the Congressional reference in the Index.

Those publications which emanated from the Department, but which were issued only as Congressional documents, are listed chronologically in the Appendix to this work.

The titles in the Tables are exact copies of the title-pages of the publications with the omission of unnecessary articles. In case of "general publications" or other series which are classified alphabetically the subject words are introduced as headings and the title follows as it appears on the publication.

In counting the maps, plates, charts, etc., in a volume the total number has been stated as "plates," except in cases where the character of the illustration was plainly determined by numbering.

When the word circular "(circ.)" appears at the end of an entry it indicates a one-page publication of uncertain size.

#### THE INDEX.

The Index, which forms the most important as well as the larger part of this work, has been carefully compiled with a view to quick reference to any special author, subject, or title. In dealing with a collection of publications differing so widely in their subject-matter, and for the most part of a scientific character, it has been found difficult to determine the best form of entry in many instances for papers with meaningless or strictly technical headings, especially when a reading of the paper by one unacquainted with the subject treated has proved equally unsatisfactory in suggesting a suitable title. There are doubtless omissions on account of these nondescript titles, which, to save time, have been used for the Index entries. Only where titles

were found perfectly meaningless, as "A few facts from Florida" or "A popular experiment," has the article been read, the reason for which is clearly indicated by the statement that a complete collection of the publications of the Department includes about 3,500 books, pamphlets, and circulars of from 1 to 1,500 pages each, some of which contain fifty or more distinct papers.

The Index entries to the *volumes* listed are in many cases greatly abbreviated, as the full title and all information concerning the publication can be obtained from the entry in the Tables, but in the case of analytical references the full title as given in the document has been entered, in order to convey as much information as possible.

In analyzing the annual reports of the chiefs of the various bureaus or offices, only papers distinct from the main report, or which, if included, have an individual author, are brought out in the Index, the various subheads in the reports not being noted.

When a date does not appear in an entry in the Index it indicates that there is more than one edition or print of the article indexed, except in cases of undated publications, where a date could not be given, or of annual report analyticals, where the date appears as the book number.

#### CONCLUSION.

The greatest drawback to systematic classification and ready reference was the vast number of miscellaneous unnumbered publications. An endeavor has been made in this list to classify in distinct series, as far as possible, this unwieldy mass, and to that end numbers have been assigned and series formed and named, or they were numbered in either the series "bulletins" or "circulars" when these series were not already filled.

There is no well-defined definition for either "bulletin" or "circular" as applied to public documents, as witnessed by the fact that the series of numbered "circulars" in the Surgeon-General's office, War Department, contains both large quarto volumes and one-page letters, while the circulars of other offices are single sheets of many varying sizes, and of some of the scientific bureaus of the Agriculture Department are small pamphlets. In assigning numbers in this list, however, the series of "bulletins" have been filled with the more important pamphlet publications, and the series "circulars," made up of the ephemeral or smaller works, generally of one-page letters.

The unnecessary multiplication of numbers on the title pages, especially of the publications of the Agriculture Department, is a subject which does not lend itself to easy explanation, if indeed there is any reason in it, and no account, therefore, has been taken in this list of the various "whole numbers" of the divisions, nor the "serial num-



bers" of certain classes of literature, which form a confused jumble of unintelligible characters on the title-pages of so many of the Department's pamphlets.

If the publications of each publishing office could be confined within the two series "bulletins" and "circulars," for which provision is made under each office in the classification; or if, in case of continued issues, they could be given a series title and series number of their own, such series title and series number to appear on the title-page (not on the cover or in the back title) of each publication, much of the confusion and oft-complained-of "multiplication of numbering" would be done away with.

Another great boon to librarians would be the adoption by the Department of a "whole number," to be assigned to all publications of the Department, no matter by which bureau issued, serially in the order of issue, printed in small type in an inconspicuous place on the title-page, or at the heading of an article, and applied without reservation to everything issued which the Department considers a "publication." This "whole number," however, not to supersede the series numbers of the publishing bureaus, but to take the place of all other title-page numbers.

In compiling lists of the publications of the Departments, everything issued by a Department, except circular letters and cards and notices of a purely office character, should be listed; and yet it is found in many instances almost impossible to determine what the Department considers a "publication," many numbered issues being of but a temporary character, while an unnumbered card or circular may be of importance, and if discarded would be regarded as a serious omission.

"Whole numbers" are now used by many of the publishing offices to designate a certain class of literature, but to be of practical value the number must be applied by the Department, and should appear on everything issued which it considers a "publication." Librarians could then easily keep track of the publications and be sure when they had them all, whereas now no one knows what constitutes a complete set of the publications of any of the great Departments.

A carefully assorted and beautifully bound collection of many of the publications of the Department, which proved of great value in compiling this list, is safely entombed in a vault in the grounds of the Department; its library has a fair representation of the publications; while most of the scientific bureaus retain files of at least the last editions of their works; but in no one place, nor in all combined, does the Department possess anything like a complete file of its valuable literature. This, however, is not surprising, for in all the well-

equipped libraries of the various Departments it is most discouraging to note the dearth of publications of the Departments themselves, a fact which should certainly be remedied.

Every bureau and office in the Department has been visited and private files searched in the endeavor to make this list complete, and it is hoped it will prove a satisfactory substitute for a catalogue of the Department's publications.

WILLIAM LEANDER POST.

PUBLIC DOCUMENTS LIBRARY,  
*October 12, 1903.*

## **TABLES**

**For a full explanation of the classification used in these Tables, see pp. 8-15, without a careful perusal of which the best results can not be obtained in using this list.**



## A. AGRICULTURE DEPARTMENT

[By an appropriation for the collection of agricultural statistics, March 3, 1839, an agricultural section was established in the Patent Office. The section continued until May 15, 1862, when it was made a separate Department, though it was not until February 9, 1889, that it was raised to the dignity of a Cabinet office.]

Classification  
no.

### A1. SECRETARY

#### A1.1: Annual reports

[The annual report on agriculture began in 1837 with a two-page statement in the report of Henry L. Ellsworth, Commissioner of Patents. From that date to 1861 it formed a part of the report of the Commissioner of Patents, making a separate volume after 1849.

In 1862 the Department of Agriculture was established and its annual report was uniformly issued up to 1893. Beginning with the report for 1894, in accordance with paragraph 2, section 73, of the printing act of January 12, 1895, the report has been prepared in two volumes, one containing the Secretary's report and the purely executive reports of the several chiefs of bureaus, divisions, and offices; the other, known as the Yearbook (A1.10:), embracing the Secretary's report and a collection of special articles on agricultural science.

The title of the head of the Department was Commissioner of Agriculture until 1889, when he became Secretary of Agriculture and a member of the Cabinet.

References to the various reports and scientific papers contained in this series of annual reports will be found under their proper headings in the Index to this work.

For further information see notes under A1.1a:]

#### COMMISSIONER OF AGRICULTURE

- 862 1862 (Newton), 632 pp., 52 pl.  
Same, 37th Cong., 3d sess., H. ex. doc. 78; serial no. 1168.
- 863 1863 (Newton), 698 pp., 48 pl.  
Same, 38th Cong., 1st sess. In H. ex. doc. v. 5; serial no. 1184.
- 864 1864 (Newton), 676 pp., 48 pl.  
Same, 38th Cong., 2d sess., H. ex. doc. 68; serial no. 1228.
- 865 1865 (Newton), iv+608 pp., 32 pl.  
Same, 39th Cong., 1st sess., H. ex. doc. 136; serial no. 1266.
- 866 1866 (Newton), 656 pp., 36 pl.  
Same, 39th Cong., 2d sess., H. ex. doc. 107; serial no. 1297.
- 867 1867 (Stokes; Capron), xix+512 pp., 37 pl.  
Same, 40th Cong., 2d sess. In H. ex. doc. v. 21; serial no. 1347.
- 868 1868 (Capron), [4]+671 pp., 19 pl.  
Same, 40th Cong., 3d sess., H. ex. doc. unnumbered; serial no. 1383.
- 869 1869 (Capron), 702 pp., 38 pl.  
Same, 41st Cong., 2d sess., H. ex. doc. unnumbered; serial no. 1428.
- 870 1870 (Capron), 688 pp., 33 pl.  
Same, 41st Cong., 3d sess., H. ex. doc. unnumbered; serial no. 1461.
- 871 1871 (Watts), [4]+524 pp., 29 pl.  
Same, 42d Cong., 2d sess., H. ex. doc. [327]; serial no. 1522.  
Same, without accompanying documents. 42d Cong., 2d sess., H. ex. doc. 1, p. 145; serial no. 1502.
- 872 1872 (Watts), 524 pp., 12 pl. (Not issued in Congressional set.)
- 873 1873 (Watts), 496 pp., 1 pl. [Erroneously assigned serial no. 1616, but never issued in Congressional set.]
- 874 1874 (Watts), 463 pp., 9 pl.  
Same, 43d Cong., 2d sess., H. ex. doc. unnumbered; serial no. 1652.
- 875 1875 (Watts), 536 pp., 61 pl. (Not issued in Congressional set.)

## Tables

Classifica-  
tion no.

### A1. SECRETARY—Continued

#### A1.1: Annual reports—Continued

- 876 1876 (Watts), 447 pp., 15 pl. (Not issued in Congressional set.)  
 877 1877 (Le Duc), 592+[1] pp., 54 pl. (Not issued in Congressional set.)  
     *See for supplemental report, 1877, A1.2:An7<sup>1</sup>*  
 878 1878 (Le Duc), 608+[1] pp., 59 pl. (Not issued in Congressional set.)  
 879 1879 (Le Duc), 621 pp., 67 pl. (Not issued in Congressional set.)  
 880 1880 (Le Duc), 672 pp., 136 pl.  
     Same, preliminary report, 46th Cong., 3d sess., S. ex. doc. 27; serial  
     no. 1941.  
 881-2 1881 and 1882 (Loring), 704 pp., 85 pl.  
     Same, 47th Cong., 1st sess., H. ex. doc. [228]; serial no. 2034.  
 883 1883 (Loring), 496 pp., 54 pl.  
     Same, 47th Cong., 2d sess., H. ex. doc. 109; serial no. 2114.  
 884 1884 (Loring), 581 pp., 71 pl.  
     Same, 48th Cong., 1st sess., H. ex. doc. 178; serial no. 2212.  
 885 1885 (Colman), 640 pp., 45 pl.  
     Same, 48th Cong., 2d sess., H. ex. doc. 269; serial no. 2309.  
 886 1886 (Colman), 719 pp., 72 pl.  
     Same, 49th Cong., 1st sess., H. ex. doc. 378; serial no. 2405.  
 887 1887 (Colman), 724 pp., 70 pl., 1 map.  
     Same, 49th Cong., 2d sess., H. ex. doc. 201; serial no. 2487.  
 888 1888 (Colman), 708 pp., 69 pl., 1 map.  
     Same, 50th Cong., 1st sess., H. ex. doc. 470; serial no. 2564.  
 SECRETARY OF AGRICULTURE  
 889 1889 (Rusk), 560 pp., 44 pl.  
     Same, 51st Cong., 1st sess., H. ex. doc. 1, pt. 7; serial no. 2732.  
 890 1890 (Rusk), 612 pp., 50 pl.  
     Same, 51st Cong., 2d sess., H. ex. doc. 1, pt. 6; serial no. 2847.  
 891 1891 (Rusk), 653 pp., 59 pl., 1 map.  
     Same, 52d Cong., 1st sess., H. ex. doc. 1, pt. 6; serial no. 2940.  
 892 1892 (Rusk), 656 pp., 71 pl.  
     Same, 52d Cong., 2d sess., H. ex. doc. 1, pt. 6; serial no. 3095.  
 893 1893 (Morton), 608 pp., 29 pl.  
     Same, 53d Cong., 2d sess., H. ex. doc. 1, pt. 6; serial no. 3216.  
 894 1894 (Morton), 120 pp.  
     Same, 53d Cong., 3d sess., H. ex. doc. 1, pt. 6; serial no. 3310.  
 895 1895 (Morton), 266 pp., 1 chart.  
     Same, 54th Cong., 1st sess., H. doc. 6; serial no 3390.  
 896 1896 (Morton), li+269 pp.  
     Same, 54th Cong., 2d sess., H. doc. 6; serial no. 3496.  
 897 1897 (Wilson), liv+226 pp.  
     Same, 55th Cong., 2d sess., H. doc. 6; serial no 3651.  
 898 1898 (Wilson), lxiii+212 pp.  
     Same, 55th Cong., 3d sess., H. doc. 6; serial no. 3768.  
 899 1899 (Wilson), lxx+266 pp.  
     Same, 56th Cong., 1st sess., H. doc. 6; serial no. 3929.  
 900 1900 (Wilson), lxxviii+297 pp.  
     Same, 56th Cong., 2d sess., H. doc. 6; serial no. 4116.  
 901 1901 (Wilson), cxv+344 pp.  
     Same, 57th Cong., 1st sess. H. doc. 6; serial no. 4301.  
 902 1902 (Wilson), cxxiv+402 pp.  
     Same, 57th Cong., 2d sess., H. doc. 6; serial no. 4466.  
     *See also, for another print of personal report of Secretary, 1902,*  
     A1.8:73

#### A1.1<sup>a</sup>: Annual reports (separates; Secretary's report)

[The personal report of the Secretary is issued separately in pamphlet form in advance of the main volume; is also the first paper in the Yearbook (A1.10:); and sometimes appears as a broadside, or as a pamphlet printed on one side of the page only, for the use of the press.]

#### A1.1<sup>a</sup>: Annual reports (separates; miscellaneous)

[Only a small number of the scientific papers accompanying the report of the Secretary are known to have been printed separately. References to *all* the scientific papers will be found under their proper headings in the index to this work.]

Classification  
no.

## A1. SECRETARY—Continued

## A.1:2 General publications

- Ag8<sup>1</sup> Agricultural Colleges. List of delegates and visitors to 10th annual convention of Association of American Agricultural Colleges and Experiment Stations. 1896. n. t. p. 3 pp.
- Ag8<sup>2</sup> Agriculture Department. [Letter as to work and needs of Department of Agriculture; by William G. Le Duc.] Feb. 27, 1880. n. t. p. 15 pp.
- Ag8<sup>3</sup> Agriculture Department. Notice of its various functions. 1893. (Circ.)
- An4 Angora. Notice of receipt of letter from Minister Terrell relating to Agriculture in Angora. Nov. 1, 1893. (Circ.)
- An5<sup>1</sup> Animal Industry Bureau. Proposed bill submitted for consideration and revision, offering amendments to act of May 29, 1884, establishing Bureau of Animal Industry, with view of more effectual control of contagious diseases. n. t. p. n. d. 12 pp. 4°
- An5<sup>2</sup> Animal Industry Bureau. [Letter of J. M. Rusk relative to establishment of Bureau of Animal Industry, etc.] Apr. 12, 1890. 8 pp.
- An7<sup>1</sup> Annual report of Commissioner of Agriculture (supplemental) to President. Nov., 1877. 19 pp.
- An7<sup>2</sup> Same, also transmitting special Department reports no. 1 [A1.6:1] and no. 3 [A1.6:3] 19+32+26 pp.
- Ap4<sup>1</sup> Apparatus for sale. Jan. 24, 1896. (Circ.)
- Ap4<sup>2</sup> Appalachian region. Message from President of U. S., transmitting report of Secretary of Agriculture [James Wilson, in collaboration with Department of the Interior], in relation to forests, rivers, and mountains of southern Appalachian region. 1902. 210 pp. 78 [80] pl. large 8°
- Same, 57th Cong., 1st sess., S. doc. 84; serial no. 4229.
- Ap6<sup>1</sup> Appointment clerk, report of. Dec. 1, 1901. n. t. p. 5 pp.
- Ap6<sup>2</sup> Same; revised. Dec. 1, 1901. n. t. p. 7 pp.
- B39<sup>1</sup> Beet sugar. Special report on beet-sugar industry in U. S. [in 1897]. 1898. 240 pp. 2 maps.
- Same, 55th Cong., 2d sess., H. doc. 396; serial no. 3691.
- B39<sup>2</sup> Same, separate, pp. iv+161-233; Beet-sugar industry in U. S. [in 1897], report of special agent Charles F. Saylor.
- B39<sup>3</sup> Same, separate, pp. 135-140, 160; Analyses of sugar beets grown in various States; by H. W. Wiley.
- B39<sup>4</sup> Beet sugar. Progress of beet-sugar industry in U. S. in 1898. 1899. 162 pp.
- Same, 55th Cong., 3d sess., H. doc. 267; serial no. 3812.
- B39<sup>5</sup> Beet sugar. Progress of beet-sugar industry in U. S. in 1899; with a supplementary report on cane-sugar industry of Hawaiian Islands. 1900. 200 pp. 4 maps.
- Same, 56th Cong., 1st sess., H. doc. 699; serial no. 3985.
- See also A1.8:69.
- C29<sup>1</sup> Cattle. Reports on diseases of cattle in U. S., made to Commissioner of Agriculture, with accompanying documents. 1869. 190 pp. 1 pl.
- C29<sup>2</sup> Cattle. Report of Commissioner of Agriculture on diseases of cattle in U. S. 1871. [4]+205 pp. 14 pl. 4°
- C29<sup>3</sup> Cattle. Correspondence with S. W. Allerton concerning exportation of Canadian cattle from port of Boston, Mass. Dec. 28, 1896. n. t. p. 11 pp.
- C29<sup>4</sup> Same. (Broadside.)
- C29<sup>5</sup> Cattle. Results of examinations of fluids of diseased cattle, with reference to presence of cryptogamic growth. 1871. 12 pp. 4° \*
- C29<sup>6</sup> Cattle. Contagious pleuro-pneumonia or lung plague of cattle; where and to what extent it exists. 1870. 17 pp. \*
- C49<sup>1</sup> Civil service. Letter relative to classified service. Dec. 16, 1895. (Circ.)
- C49<sup>2</sup> Same. Dec. 1, 1896. (Circ.)
- C49<sup>3</sup> Civil service. Civil service in [Agriculture] Department. Feb. 29, 1896. n. t. p. 2 pp.
- C49<sup>4</sup> Same. May 14, 1896. n. t. p. 2 pp.

\* No copy found.



# Tables

Classification  
no.

## A1. SECRETARY—Continued

### A1.2: General publications—Continued

- C71 Colman, N. J. Report in response to inquiries of select committee of Senate appointed to inquire into and examine the methods of business of the Executive Departments. 1888. n. t. p. 106 pp.
- C76 Convention. Proceedings of National Agricultural Convention held at Washington, Feb. 15-17, 1872. 1872. 84 pp.  
Same, 42d Cong., 2d sess., S. mis. doc. 164; serial no. 1526.
- D14 Dairy. Export of dairy products of U. S., 1821-1890. [1890.] (Circ.) \*
- Ex6<sup>1</sup> Expenditures. [Relative to restriction of expenditures in Department.] Apr. 6, 1896. (Circ.)
- Ex6<sup>2</sup> Experiments. Protest against proposed legislation restricting experiments of Department. [With copy of Senate bill 1063.] May 25, 1897. n. t. p. 8+2 pp.
- F76 Flax and Hemp Commission. Report of Flax and Hemp Commission [J. K. Moorhead, Jno. A. Warder, and Chas. Jackson], appointed under act of Congress of Feb. 25, 1863. n. p. [1865.] 96 pp. (Cover title only.)  
Same, 38th Cong., 2d sess., S. ex. doc. 35; serial no. 1209.
- H78 Horses. Market for American horses in foreign countries. 1898. 94 pp. 6 pl.
- H89 Hungarian brome grass. Notice of circular [no. 1, Botany Division] on Hungarian brome grass. June, 1894. (Circ.) \*
- In7 Inspectors. General orders to inspectors [relative to humane treatment of animals]. May 13, 1896. (Circ.)
- L48 Leave of absence not allowed to employees outside of Washington. Oct. 21, 1896. (Circ.)
- N84 Notice of receipt of communications on various subjects. July 7, 1893. (Circ.) \*
- P53 Philadelphia, Pa. Report of participation of Department of Agriculture in International Exhibition of 1876; by William Saunders. 1884. \*
- P69 Plants. Catalogue of U. S. plants in Department of Agriculture. [186-.] 27 pp. (Cover title only.)
- P94 Promotions. Regulations governing promotions, etc., in Department of Agriculture. Dec. 1, 1896. n. t. p. 3 pp.
- P96<sup>1</sup> Publications. General order [relative to] distribution of publications. Jan. 10, 1896. (Circ.)
- P96<sup>2</sup> Same, Farmers' bulletins. Oct. 15, 1895. 4 pp.
- P96<sup>3</sup> Same, Farmers' bulletins. Feb. 25, 1896. 4 pp.
- P96<sup>4</sup> Same, Farmers' bulletins. May 16, 1896. 4 pp.
- P96<sup>5</sup> Same, Farmers' bulletins. July 1, 1896. 4 pp.
- P96<sup>6</sup> Same, Farmers' bulletins. Mar. 15, 1897. 4 pp. 4°
- P96<sup>7</sup> Same, Farmers' bulletins. June 30, 1897. 4 pp. 4°
- P96<sup>8</sup> Publications. Instructions relating to purchase of publications. Jan. 22, 1896. (Circ.)
- R13 Railroad and transportation companies. Circular to railroad and transportation companies relative to prevention of exportation of diseased cattle. Feb. 24, 1890. (Circ.) \*
- R89 Rusk, Jeremiah M. Annual reports, with selected correspondence, relating to export trade of U. S. in live stock and meat products, of Jeremiah M. Rusk, 1889-92. 1893. 40+52+59+64+33 pp.  
See also for correspondence A1.8:53.
- Sci 1<sup>1</sup> Scientific work in Department. Recommendation for appointment of director in chief of scientific work. Feb. 15, 1896. n. t. p. 3 pp.
- Sci 1<sup>2</sup> Scientific work in Department. Opinions of scientific men and others with regard to proposition for a director in chief of scientific bureaus. 1st ed. [1896.] n. t. p. 3 pp.
- Sci 1<sup>3</sup> Same. 2d ed. [1896.] n. t. p. 8 pp.
- Sci 1<sup>4</sup> Same. 3d ed. [1896.] n. t. p. 16 pp.
- Sci 1<sup>5</sup> Same, additional opinions. [1896.] n. t. p. 4 pp.
- Sci 1<sup>6</sup> Same, additional resolutions. [1896.] n. t. p. 4 pp.
- Sci 1<sup>7</sup> Same, with report of Senate Committee on Agriculture and Forestry. [1896.] n. t. p. 12 pp.

\*No copy found.

Classification  
no.**A1. SECRETARY—Continued****A1.2: General publications—Continued**

- Se3<sup>1</sup> Seed. Relative to status and discontinuance of distribution of seed. July 25, 1895. (Circ.)
- Se3<sup>2</sup> Seed. Opinions of the press concerning free-seed distribution. n. d. n. t. p. 12 pp.
- Se3<sup>3</sup> Seed. Statement of secretary at joint meeting of Senate and House Committees of Agriculture [relative to] free-seed distribution. Jan. 15, 1896. n. t. p. 8 pp.
- Se3<sup>4</sup> Seed. Proposals for furnishing seed. Mar. 18, 1896. (Slip.)
- Se3<sup>5</sup> Seed. Statement in regard to award of seed contract. Apr. 16, 1896. n. t. p. 8 pp.
- Se3<sup>6</sup> Seed. Prohibiting use of Government seed envelopes by unauthorized parties. May 2, 1896. (Circ.)
- Se3<sup>7</sup> Seed. Cost of seed distribution. Jan. 30, 1897. n. t. p. 3 pp.
- Se3<sup>8</sup> Seed. Brief instructions in regard to sowing seeds and raising young plants of forest trees. n. d. 5 pp.
- Sh3 Sheep husbandry in U. S. Origin and growth of sheep husbandry in U. S., with some remarks on angora fleece. 1880. [1]+133 pp. 4 pl.  
Same, 45th Cong., 3d sess., S. ex. doc. 25; serial no. 1828.
- So1 Societies. List of agricultural and horticultural societies in U. S. 1869. \*
- Sp3 Specifications of workmanship and materials required in erection and completion of new building for accommodation of Department of Agriculture in Washington, D. C.; prepared by Cluss & Kammerhueber. 1867. 26+2 pp.
- Su3 Sugarhouse machinery for sale July 1, 1895. n. t. p. 8 pp. 4°
- T69<sup>1</sup> Traveling expenses. Allowances for traveling expenses. Oct. 1, 1889. 8 pp.
- T69<sup>2</sup> Same. July 1, 1893. 11 pp.
- V67 Vienna. Notice relating to International Exhibition, Vienna, 1894. Nov. 27, 1893. (Circ.)
- W69 Wilson, James. Speech by James Wilson, Secretary of Agriculture, delivered July 7, 1902, at School of Agriculture, Columbus, Ohio. July 17, 1902. n. t. p. 6 pp.
- W88 Wools. Report upon examination of wools and other animal fibers; by William McMurtrie. 1886. 613 pp. 72 pl. 4°  
Same, 49th Cong., 1st sess., H. mis. doc. 392. Serial no. 2426.

**A1.3: Bulletins**

None issued.

**A1.4: Circulars**

- 1 [No. 1.] Statement in regard to award of seed contract. Apr. 16, 1896. n. t. p. 8 pp.
- 2 [No. 2.] Vivisection in District of Columbia. May 16, 1896. n. t. p. 8 pp.
- 3 No. 3. Address on progress of Southern agriculture; by Charles W. Dabney. June 1, 1896. n. t. p. 12 pp.
- 4 No. 4. [Letter of protest and appeal to persons interested in animal industry, accompanying a draft of Senate bill 1552, 54th Cong., 1st sess., entitled "An act for the further prevention of cruelty to animals in District of Columbia."] June 5, 1896. n. t. p. 3 pp.
- 5 No. 5. Civil service in Department of Agriculture. June 20, 1896. n. t. p. 4 pp.
- 6 No. 6. Number, status, and compensation of employees in Department of Agriculture, July 1, 1897. Jan. 20, 1898. n. t. p. 4 pp.
- 7 No. 7. Possible influence of importation of Hawaiian sugar on beet-sugar production in United States. Jan. 17, 1898. n. t. p. 4 pp.
- 8<sup>1</sup> No. 8. [Cooperative work in grass and forage plant investigations with State experiment stations; by T. A. Williams.] Nov. 20, 1900. n. t. p. 14 pp.
- 8<sup>2</sup> Same, revised. [1901.] n. t. p. 16 pp.
- 9 No. 9. [Collection and distribution of grass seed: field work; by C. L. Shear.] Dec. 10, 1900. n. t. p. 11 pp.

\*No copy found.

# Tables

Classifica-  
tion no.

## A1. SECRETARY—Continued

### A1.5: Miscellaneous circulars

- 1 No. 1. Castor-oil plant. n. d. n. t. p. 4 pp.
- 2 No. 2. Mississippi River flood. Apr. 12, 1897. n. t. p. 6 pp.
- 3 No. 3. Mississippi River flood, 2d report. Apr. 22, 1897. n. t. p. 4 pp.

### A1.6: Special reports

- 1 No. 1. Condition and prospects of cane-sugar industry in U. S. 1877. 41 pp.  
*See also A1.2:An7<sup>2</sup>*
- No. 2. Condition of crops, etc. 1877. (In A27.9:15.)
- 3 No. 3. Thea viridis or Chinese tea-plant, and practicability of its culture and manufacture in U. S. Also some remarks on cultivation of Coffee plant. 1877. 26 pp.  
*See also A1.2:An7<sup>2</sup>*
- 4 No. 4. Cultivation of fig, and method of preparing the fruit for commerce; also report on importance of cultivation of date palm. 1878. 17 pp.
- No. 5. Condition of crops, June 1, 1878. (In A27.9:16.)
- No. 6. Condition of crops, July 1, 1878. (In A27.9:16.)
- No. 7. Condition of crops, Aug. 1, 1878. (In A27.9:16.)
- No. 8. Condition of crops, Sept. 1, 1878. (In A27.9:16.)
- No. 9. Condition of crops, Dec. 1, 1878. (In A27.9:16.)
- No. 10. Condition of crops, and live stock, Jan., 1879. (In A27.9:17.)
- 11<sup>1</sup> No. 11. The silk-worm; being brief manual of instruction for production of silk. [By C. V. Riley.] 1879. 31 pp.
- 11<sup>2</sup> Same; by C. V. Riley, 2d edition. 1882. 37 pp.
- 11<sup>3</sup> Same, 3d edition.\*
- 11<sup>4</sup> Same, 4th edition. 1883. 37 pp.
- 11<sup>5</sup> Same, 5th edition. 1884. 37 pp.
- 12 No. 12. Investigation of diseases of swine, and infectious and contagious diseases incident to other classes of domesticated animals. 1879. 292 pp. 17 pl.
- No. 13. Condition of crops and live stock, Apr., 1879. (In A27.9:17.)
- No. 14. Condition of crops and live stock, June, 1879. (In A27.9:17.)
- No. 15. Condition of crops, July 1, 1879. (In A27.9:17.)
- No. 16. Condition of crops, Aug. 1, 1879. (In A27.9:17.)
- No. 17. Condition of crops, Sept. 1, 1879. (In A27.9:17.)
- 18 No. 18. Tea-culture as a probable American industry; by William Saunders. Read before New York Horticultural Society, at its meeting, Oct. 7, 1879. 1879. 21 pp.
- No. 19. Condition of crops, Nov. 1, 1879. (In A27.9:17.)
- No. 20. Condition of crops, Dec. 1, 1879. (In A27.9:17.)
- No. 21. Number and prices of farm animals, Jan. 1, 1880. (In A27.9:18.)
- 22 No. 22. Contagious diseases of domesticated animals; continuation of investigation by Department of Agriculture. 1880. 268 pp. 15 pl. 1 map.
- No. 23. Condition of crops, Apr., 1880. (In A27.9:18.)
- No. 24. Condition of crops, June and July, 1880. (In A27.9:18.)
- No. 25. Condition of crops, Aug., 1880. (In A27.9:18.)
- 26 No. 26. Culture of sumac in Sicily, and its preparation for market in Europe and U. S.; by William McMurtrie. 1880. 32 pp. 8 pl.
- No. 27. Condition of crops, Sept., 1880. (In A27.9:18.)
- 28 No. 28. Culture of sugar beet and manufacture of sugar therefrom in France and U. S.; by William McMurtrie. 1880. 294 pp. 32 pl. 4 maps.  
[Extensively quoted in Bulletin No. 26, Chemistry Bureau. *See* A8.3:26.]
- No. 29. Condition of crops, Nov. 1, 1880. (In A27.9:18.)
- No. 30. Condition of crops, Dec. 1, 1880. (In A27.9:18.)
- 31 No. 31. Contagious pleuro-pneumonia; 3d report of Charles P. Lyman. 1881. 20 pp. 7 pl.
- No. 32. Condition of crops and live stock, Apr., 1881. (In A27.9:19.)
- 33 No. 33. Analytical work done on sorghum and cornstalks by Chemical division, July-Dec., 1880; by Peter Collier. 1881. 101 pp. 27 pl.
- 34 No. 34. Contagious diseases of domesticated animals. 1881. 391 pp. 51 pl.

\* No copy found.

Classification  
no.**A1. SECRETARY—Continued****A1.6: Special reports—Continued**

- 35 No. 35. Insects injurious to sugar cane; by J. Henry Comstock. 1881. 11 pp.
- 36 No. 36. Report upon statistics of grape culture and wine production in U. S. for 1880; by William McMurtrie. 1881. 104 pp.
- No. 37. Condition of crops, June–July, 1881. (In A27.9:19.)
- No. 38. Condition of crops, Aug. 1, 1881. (In A27.9:19.)
- No. 39. Condition of crops, Sept. 1, 1881. (In A27.9:19.)
- 40 No. 40. Condition and needs of spring wheat culture in Northwest; by C. C. Andrews. 1882. 99 pp.
- No. 41. Report upon estimated production of cereals of U. S., for year 1881. [February, 1882.] 1882. (In A27.9:20.)
- No. 42. Condition of winter grain, etc., Apr., 1882. (In A27.9:20.)
- No. 43. Condition of winter grain, etc., May, 1882. (In A27.9:20.)
- No. 44. Acreage and condition of cotton, etc., June, 1882. (In A27.9:20.)
- No. 45. Area and condition of corn, etc., July, 1882. (In A27.9:20.)
- No. 46. Condition of corn and cotton, etc., Aug., 1882. (In A27.9:20.)
- 47 No. 47. Climate, soil, and agricultural capabilities of South Carolina and Georgia; by J. C. Hemphill. 1882. 65 pp.
- 48 No. 48. Silos and ensilage; a record of practical tests in several States and Canada. 1882. 70 pp.
- No. 49. Condition of corn and cotton, etc., Sept., 1882. (In A27.9:20.)
- 50 No. 50. Dissemination of Texas fever of cattle, and how to control it. 1882. 14 pp.
- No. 51. Yield and quality of small grain, etc. 1882. (In A27.9:20.)
- No. 52. Yield per acre of cotton, corn, potatoes, etc. Nov., 1882. (In A27.9:20.)
- No. 53. Product and price of principal crops of 1882. 1882. (In A27.9:20.)
- 54 No. 54. Address of Geo. B. Loring [on sorghum sugar industry] before Mississippi Valley Cane-Growers' Association, St. Louis, Mo., Dec. 14, 1882. 1883. 19 pp.
- 55 No. 55. Grange: its origin, progress, and educational purposes, by D. Wyatt Aiken; read before a convention called by Commissioner of Agriculture January 23, 1883, to consider subject of agricultural education. 1883. 18 pp.
- No. 56. Numbers and values of farm animals, Feb., 1883. (In A27.9:21.)
- No. 57. Distribution, etc., of corn and wheat, Mar., 1883. (In A27.9:21.)
- No. 58. Area and condition of winter wheat, etc., Apr., 1883. (In A27.9:21.)
- No. 59. Condition of winter grain, etc., May, 1883. (In A27.9:21.)
- No. 60. Acreage of spring grain and cotton, etc., June, 1883. (In A27.9:21.)
- No. 61. Area of corn, potatoes, and tobacco, etc., July, 1883. (In A27.9:21.)
- 62 No. 62. Observations on soils and products of Florida; by William Saunders. 1883. 30 pp.
- 63 No. 63. Grasses of U. S.; being a synopsis of tribes and genera, with descriptions of genera, and list of species; by Geo. Vasey. 1883. 47 pp.
- No. 64. Condition of crops, etc., Aug., 1883. (In A27.9:21.)
- No. 65. Condition of crops, Sept., 1883. (In A27.9:21.)

[Series discontinued. Statistical matter of like character published after this date in Statistical report, Statistics division. A27.9:]

**A1.7: Miscellaneous special reports**

- 1 No. 1. Address of Geo. B. Loring before American Forestry Congress, St. Paul, Minn., Aug. 8, 1883 [on Forestry in U. S.] 1883. 41 pp.
- 2 No. 2. Proceedings of [2d] convention of agriculturists, held at Department of Agriculture, Jan. 23–29, 1883. 1883. 245 pp.
- 3 No. 3. Mississippi: its climate, soil, productions, and agricultural capabilities; by A. B. Hurt. 1884. 89 pp.
- 4 No. 4. Climate, soil, physical resources, and agricultural capabilities of Maine, with special reference to occupation of its new lands; by Samuel L. Boardman. 1884. 60 pp.

# Tables

Classification  
no.

## A1. SECRETARY—Continued

### A1.7: Miscellaneous special reports—Continued

- 5 No. 5. Proper value and management of Government timber lands, and distribution of North American forest trees, being papers read at U. S. Department of Agriculture, May 7-8, 1884. 1884. 47 pp.
- 6 No. 6. Address of Geo. B. Loring at National Convention of Cattle-Breeders, Chicago, Ill., Nov. 13, 1884 [on the cattle industry]; also report of veterinary inspectors of New York. 1884. 21 pp.
- 7 No. 7. Tide marshes of U. S., by D. M. Nesbit; with contributions from U. S. Coast Survey, S. L. Boardman, Eldridge Morse, and others. 1885. 259 pp.
- 8 No. 8. Cotton in Empire of Brazil; antiquity, methods, and extent of its cultivation, with statistics of exportation and home consumption; by John C. Branner. 1885. 79 pp.
- 9 No. 9. Proceedings of convention of delegates from agricultural colleges and experiment stations, held at Department of Agriculture, July 8 and 9, 1885. 1885. 196 pp.
- 10 No. 10. Descriptive catalogue of manufactures from native woods as shown in exhibit of U. S. Department of Agriculture at World's Industrial and Cotton Exposition at New Orleans, La.; by Charles Richards Dodge. 1886. 84 pp.

[Series discontinued.]

### A1.8: [Department] reports

[Nos. 1-58 were issued, 1862-1898, without numbers. A list of titles and assigned numbers for this series was printed on cover pages 3 and 4 of No. 59, which was the first to bear a number. A reprint of No. 58, in 1901, bore the number, though the old imprint date, 1898, was retained.]

- 1 [No. 1.] Circular from Commissioner of Agriculture on present agricultural, mineral, and manufacturing conditions and resources of U. S.; [by Isaac Newton]. 1862. 8 pp.
  - 2 [No. 2.] Catalogue of plants, bulbs, tubers, etc., for distribution from U. S. propagating garden, with report on object and aims of garden; by William Saunders. 1862. 8 pp.
- [Said to be the first publication issued by the Department of Agriculture.]
- 3 [No. 3.] Chemical analysis of grapes; by Charles M. Wetherill. 1862. 6 pp. \*
  - 4 [No. 4.] List of agricultural, horticultural, and pomological societies and farmers' clubs, etc., on books of Department of Agriculture, July 1, 1870, etc. 1870. 47 pp. \*
  - 5 [No. 5.] List of agricultural colleges and farmers' clubs and agricultural, horticultural, and pomological societies on books of Department of Agriculture, June 1, 1872, with name of president and secretary of each. 1872. 66 pp.
  - 6 [No. 6.] Descriptive catalogue of plants in exotic collection of the Department of Agriculture; by William Saunders. 1872. 51 pp.
  - 7 [No. 7.] Department of Agriculture: its history and objects; by James M. Swank. 1872. 64 pp. 12°.
  - 8 [No. 8.] Culture and manufacture of ramie and jute in U. S.; by Emile Lefranc. 1873. 19 pp.
  - 9 [No. 9.] Eucalyptus globulus from a botanic, economic, and medical point of view, embracing its introduction, culture, and uses; translated from the French of J. E. Planchon. 1875. 20 pp. 1 pl.
  - 10 [No. 10.] Planter's guide for cultivating and curing tobacco, with information and instruction concerning the Shelton tobacco-hanger; prepared by Shelton Tobacco-Curing Co., of Asheville, N. C. 1876. 24 pp.
  - 11 [No. 11.] Catalogue of forest trees of U. S. which usually attain height of 16 feet or more, with notes and brief descriptions of more important species, illustrating collection of forest-tree section on exhibition by Department of Agriculture at Centennial Exhibition, Philadelphia; by George Vasey. 1876. 38 pp.
  - 12 [No. 12.] List of agricultural societies and farmers' clubs established to promote the agricultural, horticultural, and pomological interests of the farmer on books of Department, July 4, 1876, with list of agricultural colleges. 1876. 63 pp.

\* No copy found.



Classification  
no.

**A1. SECRETARY—Continued**

**A1.8 [Department] reports—Continued**

- 13 [No. 13.] Statement of appropriations and expenditures of the Department, 1839 to 1877, inclusive. 1877. 18 pp.
- 14 [No. 14.] General index of agricultural reports of Patent Office, 1837-1861, and of Department of Agriculture, 1862-1876. 1879. 225 pp.  
See for supplement, 1877-1885, A1.8:42.
- 15 [No. 15.] Circular letter from Commissioner of Agriculture relative to manufacture of maize and sorghum sugars. 1879. 21 pp.
- 16 [No. 16.] Letter of Commissioner of Agriculture to Jno. W. Johnston, chairman of Senate Committee on Agriculture, on sorghum sugar [by W. G. LeDuc]. 1880. 42 pp. 33 pls. 1 folded table.
- 17 [No. 17.] Address of Geo. B. Loring and other proceedings of Cotton Convention held in Atlanta, Ga., Nov. 2, 1881. 1881. 35 pp.
- 18 [No. 18.] Fertilizers. Cooperative experimenting as means of studying effects of fertilizers and feeding capacities of plants; by W. O. Atwater. 1882. 33 pp.
- 19 [No. 19.] Artesian wells upon Great Plains; being report of geological commission appointed to examine a portion of Great Plains east of Rocky Mountains, and report upon localities deemed favorable for making experimental borings [by C. A. White and Samuel Aughey]. 1882. 38 pp. 1 map.
- 20 [No. 20.] Climatic and agricultural features, and agricultural practices and needs of arid regions of Pacific slope, with notes on Arizona and New Mexico; by E. W. Hilgard, T. C. Jones, and R. W. Furnas. 1882. 182 pp.
- 21 [No. 21.] Florida: its climate, soil, productions, and agricultural capabilities [papers by George B. Carse and James H. Foss]. 1882. 98 pp.
- 22 [No. 22.] Proceedings of convention of agriculturists held in Department of Agriculture, Jan. 10-18 [1882]. 1882. 204 pp.
- 23 [No. 23.] Area and product of cereals grown in 1879 as returned by census of 1880. 1883. 97 pp.
- 24 [No. 24.] Culture of date; by W. G. Klee. 1883. 25 pp.
- 25 [No. 25.] Necessity of agricultural education. Address before convention of presidents and professors of agricultural colleges, etc.; by Augustine J. Smith, Jan. 23, 1883. 1883. 15 pp. \*
- 26 [No. 26.] Encouragement to sorghum and beet sugar industry. 1883. 64 pp.
- 27 [No. 27.] Investigation of sorghum as sugar-producing plant; [by] Peter Collier. 1883. 68 pp. 1 pl. 3 tables.
- 28 [No. 28.] Preliminary report on forestry of Mississippi Valley, [by F. P. Baker]; Tree planting on plains, [by Robert W. Furnas]. 1883. 45 pp.
- 29 [No. 29.] Proceedings of national convention of cattle breeders and others, called in Chicago, Nov., 1883, to consider subject of contagious diseases of domestic animals. 1883. 85 pp.
- 30 [No. 30.] Report on jute culture and importance of the industry; by S. Waterhouse. 1883. 21 pp.
- 31 [No. 31.] Results of field experiments with various fertilizers; by W. O. Atwater. 1883. 183 pp. 2 folded tables.
- 32<sup>1</sup> [No. 32.] Agricultural grasses and forage plants of U. S., by Geo. Vasey; also the chemical composition of grasses, by Clifford Richardson. 1884. 144 pp. 120 pl.
- 32<sup>2</sup> [No. 32 rev.] Agricultural grasses and forage plants of U. S., and such foreign kinds as have been introduced by Geo. Vasey, botanist, with an appendix on chemical composition of grasses, by Clifford Richardson, and glossary of terms used in describing grasses. New revised and enlarged edition. 1889. 148 pp. 114 pl.
- 33 [No. 33.] Report of proceeding of national convention of cattle breeders and others, Chicago, Nov. [1884]. 1884. 21 pp. \*
- 34 [No. 34.] Microscopic observations; by Thomas Taylor. Internal parasites in domestic fowls, and butter and fats. 1884. 7 pp. 1 pl.
- 35 [No. 35.] Soils and products of southwestern Louisiana, including parishes of Saint Landry, Lafayette, Vermilion, Saint Martins, Iberia, and Saint Marys; [by E. E. Rapley]. 1884. 40 pp.

\* No copy found.

# Tables

Classification  
no.

## A1. SECRETARY—Continued

### A1.8: [Department] reports—Continued

- 36 [No. 36.] Organization and management of seven agricultural schools in Germany, Belgium, and England; by A. S. Welch. 1885. 107 pp.
- 37 [No. 37.] Address of Norman J. Colman, Commissioner of Agriculture, before convention of agricultural colleges and experiment stations, Washington, D. C., July 8, 1885. 1885. 17 pp.
- 38 [No. 38.] Addresses of Norman J. Colman and D. E. Salmon, before third national convention of stockmen, Chicago, Nov., 1885. 1885. 29 pp.
- 39 [No. 39.] Directory of departments, boards, societies, colleges, and other organizations in interest of agriculture, horticulture, stock raising, dairying, bee keeping, fish culture, and kindred industries. 1885. 88 pp.
- 40 [No. 40.] Report of exhibits illustrating agricultural statistics at World's Industrial and Cotton Exposition, New Orleans, La.; by J. R. Dodge. 1885. 42 pp. 27 diagrams.
- 41 [No. 41.] Report on condition of dairying in principal dairy States for season of 1885. 1886. 35 pp.
- 42 [No. 42.] Supplement to general index of agricultural reports, 1877 to 1885. 1886. 113 pp.  
See for general index A1.8:14.
- 43 [No. 43.] Addresses of Norman J. Colman and D. E. Salmon, before national cattle growers' convention, Kansas City, Mo., Oct. 31 and Nov. 1 and 2, 1887. 1887. 11 pp.
- 44 [No. 44.] Rules and regulations of U. S. Department of Agriculture for suppression and extirpation of all contagious, infectious, and communicable diseases among domestic animals of U. S.; [by Norman J. Colman]. 1887. n. t. p. 7 pp.
- 45 [No. 45.] Association of American Agricultural Colleges and Experiment Stations convention held in Washington, D. C., Oct., 1887. Report of committee on station work. W. O. Atwater, S. W. Johnson, Geo. H. Cook, committee. 1888. 32 pp.
- 46 [No. 46.] Hog cholera: its history, nature, and treatment as determined by inquiries and investigations of Bureau of Animal Industry; [by D. E. Salmon]. 1889. 197 pp. 16 pl.
- 47 [No. 47.] Catalogue of economic plants in collection of Department of Agriculture; by William Saunders. 1891. 42 pp.
- 48 [No. 48.] Papers on horticultural and kindred subjects; by William Saunders. Reprinted from reports of Department of Agriculture, 1863-1889. 1891. 124 pp.
- 49<sup>1</sup> [No. 49.] Report on use of maize (Indian corn) in Europe and on possibilities of its extension; 1. Introduction of maize into Europe, by Charles J. Murphy; 2. Food value of maize, by H. W. Wiley; 3. Indian corn industry in United States, by B. W. Snow. 1891. 36 pp.
- 49<sup>2</sup> Same, in French (with omission of article by Charles J. Murphy). 1892. 22 pp.
- 49<sup>3</sup> Same, in German (with omission of article by Charles J. Murphy, and addition of recipe for "Murphy-brod"). 1892. 23 pp.
- 49<sup>4</sup> Same, in Scandinavian (with omission of article by Charles J. Murphy). 1892. 22 pp.
- 49<sup>5</sup> Same, in Spanish (with omission of article by Charles J. Murphy). 1892. 24 pp.
- 50 [No. 50.] Progress report on dairy industry of Denmark; by C. C. George-son. [1893.] 14 pp.
- 51 [No. 51.] Studies of parasitic and predaceous insects in New Zealand, Australia, and adjacent islands; by A. Koebele. 1893. 39 pp.
- 52<sup>1</sup> [No. 52.] Indian corn (or maize) in manufacture of beer; by Robert Wahl. 1893. 21 pp.
- 52<sup>2</sup> Same, German. 1893. 22 pp.
- 53 [No. 53.] Selected correspondence relating to export trade in live stock and meat products; [by J. M. Rusk. 1893.] 33 pp.  
See also A1.2:R89.

Classification  
no.**A1. SECRETARY—Continued****A1.8: [Department] reports—Continued**

- 54 [No. 54.] Suggestions regarding cooking of food; by Edward Atkinson; with introductory statements regarding nutritive value of common food materials; by Ellen H. Richards. 1894. 31 pp.
- 55 [No. 55.] List of publications of U. S. Department of Agriculture, 1889-93, inclusive. 1894. 42 pp.
- 56<sup>1</sup> [No. 56.] Arbor day; its history and observance; by N. H. Egleston. 1896. 80 pp.
- 56<sup>2</sup> Same, rev. ed. 1896. 80 pp.
- 57 [No. 57.] Proceedings of National convention for suppression of insect pests and plant diseases by legislation, held at Washington, D. C., Mar. 5 and 6, 1897; edited by B. T. Galloway. 1897. 31 pp.
- 58<sup>1</sup> [No. 58.] Cultivation of tobacco in Sumatra; by Emile Mulder. 1898. 39 pp. 1 pl.
- 58<sup>2</sup> No. 58. Same. 1898 [1901]. 39 pp. 1 pl.
- 59 No. 59. Curing and fermentation of cigar-leaf tobacco; by Oscar Loew. 1899. 34 pp.
- 60 No. 60. Temperature changes in fermenting piles of cigar-leaf tobacco; by Milton Whitney and Thos. H. Means. 1899. 28 pp.
- 61 No. 61. Tea culture: the experiment in South Carolina; by Charles U. Shepard. 1899. 27 pp. 9 pl.
- 62 No. 62. Cultivation of cigar-leaf tobacco in Florida; by Marcus L. Floyd. 1899. 31 pp. 8 pl.
- 63 No. 63. Work of agricultural experiment stations on tobacco; abstracted by J. I. Schulte, with introduction and comments by Milton Whitney. 1900. 48 pp.
- 64<sup>1</sup> No. 64. Field operations of Division of Soils, 1899, by Milton Whitney; with accompanying papers by Thomas H. Means, Frank D. Gardner, Clarence W. Dorsey, Frank K. Cameron, Lyman J. Briggs. 1900. 198 pp. 29 pl.
- 64<sup>2</sup> Same. Maps. 11 maps in cloth folder (octavo).  
Same, with maps, 56th Cong., 1st sess., H. doc. 399; serial no. 3985.  
[For subsequent editions see A26.5:]
- 65 No. 65. Physiological studies of Connecticut leaf tobacco; by Oscar Loew. 1900. 57 pp.
- 66 No. 66. Sheep and wool, a review of progress of American sheep husbandry; by J. R. Dodge. 1900. 63 pp.
- 67 No. 67. Foreign markets for American agricultural products; testimony of Frank H. Hitchcock before Industrial Commission. 1901. 53 pp.
- 68 No. 68. Catalase, a new enzym of general occurrence, with special reference to tobacco plant; by Oscar Loew. 1901. 47 pp.
- 69 No. 69. Progress of beet-sugar industry in U. S. in 1900. 1901. 178 pp.  
*See also* A1.2:B39 and A1.8:72.
- 70 No. 70. Exhaustion and abandonment of soils; testimony of Milton Whitney before Industrial Commission. 1901. 48 pp.
- 71 No. 71. Some mutual relations between alkali soils and vegetation; by Thomas H. Kearney and Frank K. Cameron. 1902. 78 pp.
- 72 No. 72. Progress of beet-sugar industry in U. S. in 1901. 1902. 106 pp. 15 pl.  
Same, 57th Cong., 1st sess., S. doc. 316; serial no. 4241.  
*See also* A1.2:B39 and A1.8:69.
- 73 No. 73. Report of Secretary of Agriculture, 1902. 1902. 96 pp.  
*See also* other prints A1.1:902.

**A1.9: Farmers' bulletins**

- 1 No. 1. What and why of agricultural experiment stations. 1889. 16 pp.
- 2 No. 2. Work of agricultural experiment stations. 1890. 16 pp.
- 3 No. 3. Culture of sugar beet; by H. W. Wiley. 1891. 24 pp.
- 4 No. 4. Fungous diseases of grape and their treatment; by B. T. Galloway. 1891. 12 pp.
- 5 No. 5. Treatment of smuts of oats and wheat. 1892. 8 pp. 1 pl.
- 6 No. 6. Tobacco, instructions for its cultivation and curing; by John M. Estes. 1892. 8 pp.



## Tables

Classifica-  
tion no.

## A1. SECRETARY—Continued

### A1.9: Farmers' bulletins—Continued

- |                 |  |
|-----------------|--|
| 7 <sup>1</sup>  | No. 7. Spraying fruits for insect pests and fungous diseases, with special consideration of subject in its relation to public health. 1892. 20 pp. |
| 7 <sup>2</sup>  | No. 7 [partial reprint]. Spraying for fungous diseases of apple, pear, and other fruits. 1895. 14 pp.  |
| 8               | No. 8. Results of experiments with inoculation for prevention of hog cholera; by D. E. Salmon, 1892. 40 pp.  |
| 9               | No. 9. Milk fermentations and their relations to dairying. 1892. 24 pp.  |
| 10              | No. 10. Russian thistle and other troublesome weeds in wheat region of Minnesota and North and South Dakota. 1893. 16 pp. 2 pl.                    |
| 11              | No. 11. Rape plant, its history, culture, and uses; by Thomas Shaw. 1893. 20 pp.   |
| 12              | No. 12. Nostrums for increasing yield of butter; by Harvey W. Wiley. 1893. 16 pp.  |
| 13              | No. 13. Cranberry culture; by William Saunders. 1894. 16 pp.   |
| 14              | No. 14. Fertilizers for cotton; by J. M. McBryde. 1894. 32 pp.   |
| 15              | No. 15. Some destructive potato diseases, what they are and how to prevent them; by B. T. Galloway. 1894. 8 pp.                                    |
| 16              | No. 16. Leguminous plants for green manuring and feeding; by E. W. Allen. 1894. 24 pp.   |
| 17              | No. 17. Peach yellows and peach rosette; by Erwin F. Smith. 1894. 20 pp.   |
| 18 <sup>1</sup> | No. 18. Forage plants for the South; by S. M. Tracy. 1894. 30 pp.  |
| 18 <sup>2</sup> | Same, with list of Farmers' bulletins. 1897. 31 pp.  |
| 19 <sup>1</sup> | No. 19. Important insecticides, directions for their preparation and use; by C. L. Marlatt. 1894. 20 pp.   |
| 19 <sup>2</sup> | Same, rev. ed. 1895. 23 pp.  |
| 19 <sup>3</sup> | Same, [reprint, 1897]. 24 pp.  |
| 19 <sup>4</sup> | Same, 3d rev. ed. 1897. 32 pp.   |
| 19 <sup>5</sup> | Same, 4th rev. ed. 1898. 32 pp.  |
| 20              | No. 20. Washed soils: how to prevent and reclaim them. 1894. 22 pp.  |
| 21              | No. 21. Barnyard manure; by W. H. Beal. 1894. 32 pp.   |
| 22 <sup>1</sup> | No. 22. Feeding of farm animals; by E. W. Allen. 1895. 32 pp.  |
| 22 <sup>2</sup> | Same, rev. 1897. 32 pp.  |
| 22 <sup>3</sup> | Same, rev. ed. 1901. 44 pp.  |
| 23              | No. 23. Foods: nutritive value and cost; by W. O. Atwater. 1894. 32 pp.  |
| 24              | No. 24. Hog cholera and swine plague; by D. E. Salmon. 1894. 16 pp.  |
| 25 <sup>1</sup> | No. 25. Peanuts: culture and uses; by R. B. Handy. 1895. 24 pp.  |
| 25 <sup>2</sup> | Same [new ed.] 1896. 24 pp.  |
| 26 <sup>1</sup> | No. 26. Sweet potatoes, culture and uses; by J. F. Duggar. 1895. 30 pp.  |
| 26 <sup>2</sup> | Same [reprinted]. 1897. 30 pp.   |
| 26 <sup>3</sup> | Same, revised. 1900. 32 pp.  |
| 27              | No. 27. Flax for seed and fiber in U. S.; by Chas. Richards Dodge. 1895. 16 pp.  |
| 28 <sup>1</sup> | No. 28. Weeds, and how to kill them; by Lyster H. Dewey. 1895. 31 pp.  |
| 28 <sup>2</sup> | Same, [reprint, 1898]. With list of Farmers' bulletins. 32 pp.   |
| 28 <sup>3</sup> | Same, revised edition. 1902. 31 pp.  |
| 29              | No. 29. Souring of milk and other changes in milk products. 1895. 23 pp.   |
| 30              | No. 30. Grape diseases on Pacific coast; by Newton B. Pierce. 1895. 15 pp.   |
| 31 <sup>1</sup> | No. 31. Alfalfa, or lucern; [by] Jared G. Smith. 1895. 23 pp.  |
| 31 <sup>2</sup> | Same, rev. ed. 1898. 23 pp.  |
| 31 <sup>3</sup> | Same, [rev. ed.] 1899. 24 pp.  |
| 32              | No. 32. Silos and silage; by Charles S. Plumb. 1895. 31 pp.  |
| 33 <sup>1</sup> | No. 33. Peach growing for market; by Erwin F. Smith. 1895. 24 pp.  |
| 33 <sup>2</sup> | Same [2d ed.] 1895 [1897]. 24 pp.  |
| 34              | No. 34. Meats: composition and cooking; by Chas. D. Woods. 1896. 29 pp.  |
| 35              | No. 35. Potato culture; by J. F. Duggar. 1896. 23 pp.  |
| 36              | No. 36. Cotton seed and its products. 1896. 16 pp.   |
| 37 <sup>1</sup> | No. 37. Kafir corn, characteristics, culture, and uses; by C. C. Georgeson. 1896. 12 pp.   |
| 37 <sup>2</sup> | Same, [reprint, different illustrations, p. 12 extended]. 1896 [1897]. 12 pp.  |

**A1. SECRETARY—Continued****A1.9: Farmers' bulletins—Continued**

- 38 No. 38. Spraying for fruit diseases; by B. T. Galloway. 1896. 12 pp.
- 39 No. 39. Onion culture; by R. L. Watts. 1896. 31 pp.
- 40<sup>1</sup> No. 40. Farm drainage; by C. G. Elliott. 1896. 24 pp.
- 40<sup>2</sup> Same, rev. 1899. 24 pp.
- 41 No. 41. Fowls: care and feeding; by G. C. Watson. 1896. 24 pp.
- 42 No. 42. Facts about milk; by R. A. Pearson. 1896. 29 pp.
- 43 No. 43. Sewage disposal on farm, and protection of drinking water; by Theobald Smith. 1896. 20 pp.
- 44<sup>1</sup> No. 44. Commercial fertilizers, composition and use; by Edward B. Voorhees. 1896. 24 pp.
- 44<sup>2</sup> Same, [2d print, with changes]. Sept. 1896. 24 pp.
- 45<sup>1</sup> No. 45. Some insects injurious to stored grain; by F. H. Chittenden. 1896. 24 pp.
- 45<sup>2</sup> Same, rev. ed. 1897. 24 pp.
- 46 No. 46. Irrigation in humid climates; by F. H. King. 1896. 27 pp.
- 47 No. 47. Insects affecting cotton plant; by L. O. Howard. Reprinted, with revision by author, from Bulletin 33, Office of Experiment Stations. 1897. 32 pp.
- 48 No. 48. Manuring of cotton; condensed from article by H. C. White, in Bulletin no. 33 of Office of Experiment Stations. 1897. 16 pp.
- 49 No. 49. Sheep feeding; by John A. Craig. 1897. 24 pp.
- 50<sup>1</sup> No. 50. Sorghum as a forage crop; by Thomas A. Williams. 1897. 20 pp.
- 50<sup>2</sup> Same, rev. 1899. 20 pp.
- 51<sup>1</sup> No. 51. Standard varieties of chickens; by George E. Howard. 1897. 48 pp.
- 51<sup>2</sup> Same, [2d ed.] rev. 1897. 48 pp.
- 51<sup>3</sup> Same, [3d ed.] rev. 1899. 48 pp.
- 52<sup>1</sup> No. 52. Sugar beet, culture, seed development, manufacture, and statistics; by H. W. Wiley. 1897. 48 pp.
- 52<sup>2</sup> Same, rev. 1899. 48 pp.
- 52<sup>3</sup> Same, 2d rev. ed. [statistical matter revised]; by G. L. Spencer. 1901. 48 pp.
- 53 No. 53. How to grow mushrooms; by William Falconer. 1897. 20 pp.
- 54<sup>1</sup> No. 54. Some common birds in their relation to agriculture; by F. E. L. Beal. 1897. 40 pp.
- 54<sup>2</sup> Same, rev. 1898. 40 pp.
- 55 No. 55. Dairy herd, its formation and management; by Henry E. Alvord. Reprinted, with revision by author, from Yearbook for 1894. 1897. 24 pp.
- 56 No. 56. Experiment station work, 1. 1897. 31 pp.  
*See also* A10.11:1.
- 57<sup>1</sup> No. 57. Butter making on the farm; by C. P. Goodrich. 1897. 15 pp.
- 57<sup>2</sup> Same, 2d print. 1897 [1898]. 16 pp.
- 58<sup>1</sup> No. 58. Soy bean as a forage crop, by Thomas A. Williams; with appendix on soy beans as food for man, by C. F. Langworthy. 1897. 24 pp.
- 58<sup>2</sup> Same, rev. 1897. 24 pp.
- 58<sup>3</sup> Same, rev. 1899. 24 pp.
- 59 No. 59. Bee keeping; by Frank Benton. 1897. 32 pp.
- 60<sup>1</sup> No. 60. Methods of curing tobacco; by Milton Whitney. 1897. 16 pp.
- 60<sup>2</sup> Same, rev. ed. 1898. 16 pp.
- 60<sup>3</sup> Same, 2d rev. ed. 1902. 24 pp.
- 61 No. 61. Asparagus culture; by R. B. Handy. 1897. 40 pp.
- 62 No. 62. Marketing farm produce; by George G. Hill. 1897. 28 pp.
- 63 No. 63. Care of milk on farm; by R. A. Pearson. 1897. 40 pp.
- 64 No. 64. Ducks and geese, standard breeds and management; by George E. Howard. 1897. 48 pp.
- 65 No. 65. Experiment station work, 2. 1898. 32 pp.  
*See also* A10.11:1.
- 66<sup>1</sup> No. 66. Meadows and pastures, formation and cultivation in Middle Eastern States; by Jared G. Smith. 1897. 24 pp.
- 66<sup>2</sup> Same, rev. ed. 1899. 28 pp.
- 67 No. 67. Forestry for farmers; by B. E. Fernow. (Reprinted from Yearbooks of Department of Agriculture for 1894 and 1895.) 1898. 48 pp.

# Tables

Classification  
no.

## A1. SECRETARY—Continued

### A1.9: Farmers' bulletins—Continued

- |                 |   |
|-----------------|---|
| 68              | No. 68. Black rot of cabbage; by Erwin F. Smith. 1898. 22 pp.   |
| 69              | No. 69. Experiment station work, 3. 1898. 32 pp.<br><i>See also</i> A10.11:1.   |
| 70              | No. 70. Principal insect enemies of grape; by C. L. Marlatt. 1898. 23 pp.   |
| 71              | No. 71. Some essentials in beef production; by Charles F. Curtiss. 1898. 24 pp.   |
| 72              | No. 72. Cattle ranges of the Southwest, history of exhaustion of pasturage and suggestions for its restoration; by H. L. Bentley. 1898. 32 pp.                                  |
| 73              | No. 73. Experiment station work, 4. 1898. 32 pp.<br><i>See also</i> A10.11:1.   |
| 74              | No. 74. Milk as food. 1898. 39 pp.  |
| 75              | No. 75. Grain smuts; how they are caused and how to prevent them; by Walter T. Swingle. 1898. 20 pp.  |
| 76              | No. 76. Tomato growing; by Edward B. Voorhees. 1898. 30 pp.   |
| 77 <sup>1</sup> | No. 77. Liming of soils; by H. J. Wheeler. 1898. 19 pp.   |
| 77 <sup>2</sup> | Same. rev. 1899. 19 pp.   |
| 78              | No. 78. Experiment station work, 5. 1898. 32 pp.<br><i>See also</i> A10.11:1.   |
| 79              | No. 79. Experiment station work, 6. 1898. 28 pp.<br><i>See also</i> A10.11:1.   |
| 80              | No. 80. Peach twig-borer, an important enemy of stone fruits; by C. L. Marlatt. 1898. 16 pp.  |
| 81              | No. 81. Corn culture in South; by S. M. Tracy. 1898. 24 pp.   |
| 82              | No. 82. Culture of tobacco; by Otto Carl Butterweck. 1898. 24 pp.   |
| 83              | No. 83. Tobacco soils; by Milton Whitney. 1898. 23 pp.  |
| 84              | No. 84. Experiment station work, 7. 1898. 32 pp.<br><i>See also</i> A10.11:1.   |
| 85              | No. 85. Fish as food; by C. F. Langworthy. 1898. 30 pp.   |
| 86              | No. 86. Thirty poisonous plants of U. S.; by V. K. Chesnut. 1898. 32 pp.  |
| 87              | No. 87. Experiment station work, 8. 1899. 32 pp.<br><i>See also</i> A10.11:1.   |
| 88              | No. 88. Alkali lands; by Milton Whitney and Thomas H. Means. 1899. 23 pp.   |
| 89              | No. 89. Cowpeas; by Jared G. Smith. 1899. 16 pp.  |
| 90              | No. 90. Manufacture of sorghum sirup; by A. A. Denton. 1899. 32 pp.   |
| 91              | No. 91. Potato diseases and their treatment; by B. T. Galloway. 1899. 12 pp.  |
| 92              | No. 92. Experiment station work, 9. 1899. 30 pp.<br><i>See also</i> A10.11:1.   |
| 93              | No. 93. Sugar as food; by Mary Hinman Abel. 1899. 27 pp.  |
| 94              | No. 94. Vegetable garden; by Charles H. Greathouse. 1899. 24 pp.  |
| 95 <sup>1</sup> | No. 95. Good roads for farmers; by Maurice O. Eldridge. 1899. 47 pp.  |
| 95 <sup>2</sup> | Same, [2d ed.] 1900. 47 pp.   |
| 96              | No. 96. Raising sheep for mutton; by Charles F. Curtiss. 1899. 48 pp.   |
| 97              | No. 97. Experiment station work, 10. 1899. 32 pp.<br><i>See also</i> A10.11:1.  |
| 98              | No. 98. Suggestions to southern farmers. 1899. 48 pp.   |
| 99              | No. 99. Three insect enemies of shade trees; by L. O. Howard. (Reprinted with some annotations by the author from Yearbook of Department of Agriculture for 1895.) 1899. 30 pp. |
| 100             | No. 100. Hog raising in the South; by S. M. Tracy. 1899. 40 pp.   |
| 101             | No. 101. Millets; by Thomas A. Williams. 1899. 28 pp.   |
| 102             | No. 102. Southern forage plants; compiled from publications of Division of Agrostology, by F. Lamson-Scribner. 1899. 48 pp.   |
| 103             | No. 103. Experiment station work, 11. 1899. 32 pp.<br><i>See also</i> A10.11:1.   |
| 104             | No. 104. Notes on frost; by E. B. Garriott. 1899. 24 pp.  |
| 105             | No. 105. Experiment station work, 12. 1899. 32 pp.<br><i>See also</i> A10.11:1.   |
| 106             | No. 106. Breeds of dairy cattle; by Henry E. Alvord. (Reprinted from report of Bureau of Animal Industry for 1898.) 1899. 48 pp.  |

Classification no.

**A1. SECRETARY—Continued**

**A1.9: Farmers' bulletins—Continued**

- 107 No. 107. Experiment station work, 13. 1899. 32 pp.  
*See also A10.11:1.*
- 108 No. 108. Saltbushes; by P. Beveridge Kennedy. 1900. 20 pp.
- 109 No. 109. Farmers' reading courses; by L. H. Bailey. (Abridgment of  
bull. 72, exp. stations). 1900. 20 pp.
- 110 No. 110. Rice culture in U. S.; by S. A. Knapp. 1900. 28 pp.
- 111 No. 111. Farmer's interest in good seed; by A. J. Pieters. 1900. 24 pp.
- 112 No. 112. Bread and principles of bread making; by Helen W. Atwater.  
1900. 39 pp.
- 113 No. 113. Apple and how to grow it; by G. B. Brackett. 1900. 32 pp.
- 114 No. 114. Experiment station work, 14. 1900. 28 pp.  
*See also A10.11:1.*
- 115 No. 115. Hop culture in California; by Daniel Flint. 1900. 28 pp.
- 116 No. 116. Irrigation in fruit growing; by E. J. Wickson. 1900. 48 pp.
- 117 No. 117. Sheep, hogs, and horses in Pacific Northwest; 1. Sheep hus-  
bandry, by James Withcombe; 2. Hog raising, by Hiram T.  
French; 3. Horse industry, by S. B. Nelson. 1900. 28 pp.
- 118 No. 118. Grape growing in South [by] S. M. Tracy. 1900. 32 pp.
- 119 No. 119. Experiment station work, 15. 1900. 31 pp.  
*See also A10.11:1.*
- 120 No. 120. Principal insects affecting tobacco plant; by L. O. Howard.  
(Reprinted, with slight revision by the author, from Yearbook of  
Department of Agriculture for 1898.) 1900. 32 pp.
- 121 No. 121. Beans, peas, and other legumes as food; by Mary Hinman Abel.  
1900. 32 pp.
- 122 No. 122. Experiment station work, 16. 1900. 32 pp.  
*See also A10.11:1.*
- 123 No. 123. Red clover seed: information for purchasers; by A. J. Pieters.  
1901. 11 pp.
- 124 No. 124. Experiment station work, 17. 1901. 32 pp.  
*See also A10.11:1.*
- 125 No. 125. Protection of food products from injurious temperatures; by  
H. E. Williams. 1901. 26 pp.
- 126 No. 126. Practical suggestions for farm buildings; by George G. Hill.  
1901. 48 pp.
- 127 No. 127. Important insecticides: directions for their preparation and  
use; revision of Farmers' Bulletin no. 19; by C. L. Marlatt. 1901.  
42 pp.
- 128<sup>1</sup> No. 128. Eggs and their uses as food; by C. F. Langworthy. 1901. 32 pp.
- 128<sup>2</sup> Same, revised edition. 1901. 32 pp.
- 129<sup>1</sup> No. 129. Sweet potatoes; by D. M. Nesbit. 1901. 40 pp.
- 129<sup>2</sup> Same [revised]. 1902. 40 pp.
- 130 No. 130. Mexican cotton-boll weevil; by Frederick W. Mally. 1901.  
30 pp.
- 131 No. 131. Household tests for detection of oleomargarine and renovated  
butter; by G. E. Patrick. 1901. 11 pp.
- 132 No. 132. Principal insect enemies of growing wheat; by C. L. Marlatt.  
1901. 40 pp.
- 133 No. 133. Experiment station work, 18. 1901. 32 pp.  
*See also A10.11:1.*
- 134 No. 134. Tree planting on rural school grounds; by Wm. L. Hall. 1901.  
38 pp.
- 135 No. 135. Sorghum sirup manufacture; by A. A. Denton. 1901. 40 pp.
- 136 No. 136. Earth roads; by Maurice O. Eldridge. 1902. 24 pp.
- 137 No. 137. Angora goat; by George Fayette Thompson. 1901. 48 pp.
- 138 No. 138. Irrigation in field and garden; by E. J. Wickson. 1901. 40 pp.
- 139 No. 139. Emmer; a grain for semiarid regions; by Mark Alfred Carleton.  
1901. 16 pp.
- 140 No. 140. Pineapple growing; by Peter H. Rolfs. 1901. 48 pp.
- 141 No. 141. Poultry raising on farm; by D. E. Salmon. 1901. 16 pp.
- 142 No. 142. Principles of nutrition and nutritive value of food; by W. O.  
Atwater. 1902. 48 pp.

## Tables

Classifica-  
tion no.

## A1. SECRETARY— continued

### A1.9: Farmers' bulletins—Continued

- 143 No. 143. Conformation of beef and dairy cattle; by Andrew M. Soule. 1902. 44 pp.
- 144 No. 144. Experiment station work, 19. 1901. 32 pp.  
*See also* A10.11:1.
- 145 No. 145. Carbon bisulphid as an insecticide; by W. E. Hinds. 1902. 28 pp.
- 146 No. 146. Insecticides and fungicides: chemical composition and effectiveness of certain preparations; by J. K. Haywood. 1902. 16 pp.
- 147 No. 147. Winter forage crops for the South; by Carleton R. Ball. 1902. 36 pp.
- 148 No. 148. Celery culture; by W. R. Beattie. 1902. 32 pp.
- 149 No. 149. Experiment station work, 20. 1902. 32 pp.  
*See also* A10.11:1.
- 150 No. 150. Clearing new land; by Franklin Williams, jr. 1902. 24 pp.
- 151 No. 151. Dairying in the South; by S. M. Tracy. 1902. 48 pp.
- 152 No. 152. Scabies in cattle; by Richard W. Hickman. 1902. 24 pp.
- 153 No. 153. Orchard enemies in Pacific Northwest; by C. V. Piper. 1902. 39 pp.
- 154 No. 154. Home fruit garden, preparation and care; by L. C. Corbett. 1902. 20 pp.
- 155 No. 155. How insects affect health in rural districts; by L. O. Howard. 1902. 20 pp.
- 156 No. 156. Home vineyard, with special reference to northern conditions; by W. H. Ragan. 1902. 24 pp.
- 157 No. 157. Propagation of plants; by L. C. Corbett. 1902. 24 pp.
- 158 No. 158. How to build small irrigation ditches; by C. T. Johnston and J. D. Stannard. 1902. 28 pp.
- No. 159. Not yet issued.
- 160 No. 160. Game laws for 1902; summary of provisions relating to seasons, shipment, sale, and licenses; by T. S. Palmer and H. W. Olds. 1902. 56 pp.
- 161 No. 161. Practical suggestions for fruit growers; by H. P. Gould. 1902. 28 pp.

### A1.10: Yearbook

[Since 1894 the Yearbook has been issued as second part of the report of the Secretary of Agriculture, including, besides the report of the Secretary, scientific reports of division chiefs and miscellaneous papers on agricultural science.]

- 894 1894, 608 pp., 7 pl.  
Same, 53d Cong., 3d sess., H. ex. doc. 355; serial no. 3326.
- 895 1895, 656 pp., 10 pl.  
Same, 54th Cong., 1st sess., H. doc. 380; serial no. 3441.
- 896 1896, 686 pp., 6 pl.  
Same, 54th Cong., 2d sess., H. doc. 6, pt. 2; serial no. 3496.
- 897 1897, 792 pp., 41 pl.  
Same, 55th Cong., 2d sess., H. doc. 454; serial no. 3693.
- 898 1898, 768 pp., 42 pl.  
Same, 55th Cong., 3d sess., H. doc. 293; serial no. 3824.
- 899<sup>1</sup> 1899, 880 pp., 64 pl.
- 899<sup>2</sup> Same, printed on heavier paper and lettered on back "Special edition Paris Exposition, 1900."  
Same, 56th Cong., 1st sess., H. doc. 588; serial no. 3996.
- 900 1900, 888 pp., 87 pl., 1 por.  
Same, 56th Cong., 2d sess., H. doc. 519; serial no. 4179.
- 901 1901, 846 pp., 90 pl., 1 por.  
Same, 57th Cong., 1st sess., H. doc. 661; serial no. 4385.

### A1.10<sup>a</sup>: Yearbook (separates)

[The Secretary's report and most of the articles on scientific subjects contained in the Yearbook are printed separately.]

Classifica-  
tion no.**A2. ACCOUNTS AND DISBURSEMENTS DIVISION****A2.1: Annual reports**

- 1892 (Fuller). (In A1.1:892, p. 513).  
 893 1893 (Evans), pp. iii+411-416. (Also in A1.1:893, p. 411.)  
 894 1894 (Evans), pp. iii+189-194. (Also in A1.1:894, p. 189.)  
 895 1895 (Evans), pp. iii+245-264. (Also in A1.1:895, p. 245.)  
 896 1896 (Evans), pp. iii+71-82. (Also in A1.1:896, p. 71.)  
 897 1897 (Evans), pp. iii+93-110. (Also in A1.1:897, p. 93.)  
 898 1898 (Evans), pp. iii+87-102. (Also in A1.1:898, p. 87.)  
 899 1899 (Evans), pp. iii+215-233. (Also in A1.1:899, p. 215.)  
 900 1900 (Evans), pp. iii+233-263. (Also in A1.1:900, p. 233.)  
 901 1901 (Evans), pp. iii+253-269. (Also in A1.1:901, p. 253.)  
 902 1902 (Evans), pp. iii+219-233. (Also in A1.1:902, p. 219.)

**A2.2: General publications**

[Publications which originated in this Division, but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of the Division issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

- Ap6 Appropriations. Use of annual appropriations. [Decision of Comptroller of Treasury, Apr. 18, 1900] reprinted for use of disbursing officer, Agriculture Department. n. t. p. 4 pp.  
 F49 Financial transactions. Regulations governing financial transactions with U. S. Department of Agriculture, with extracts from Revised Statutes, decisions of the Comptrollers, etc. 1894. 42 pp. 1 folded table.  
 F52<sup>1</sup> Fiscal regulations of U. S. Department of Agriculture, with extracts from Revised Statutes, decisions of courts, rulings of the Comptrollers, opinions of Attorneys-General, etc. 1898. 45 pp. 1 folded table.  
 F52<sup>2</sup> Same. Revised edition, 1901. 49 pp. 1 folded table.

**A2.3: Bulletins**

None issued.

**A2.4: Circulars**

None issued.

**A3. AGROSTOLOGY DIVISION**

[For historical sketch of Division, see Yearbook, 1897, p. 180 (A1.10:897). The Division was merged into Bureau of Plant Industry July 1, 1901. See A19.]

**A3.1: Annual reports**

- 1895 (Scribner). (In A1.1:895, p. 165).  
 896 1896 (Scribner), pp. iii+103-108. (Also in A1.1:896, p. 103.)  
 897 1897 (Scribner), pp. [i]+161-166. (Also in A1.1:897, p. 161.)  
 898 1898 (Scribner), pp. iii+145-152. (Also in A1.1:898, p. 145.)  
 899 1899 (Scribner), pp. iii+113-117. (Also in A1.1:899, p. 113.)  
 900 1900 (Scribner), pp. iii+83-90. (Also in A1.1:900, p. 83.)  
 1901 (Scribner). This final report of the Division was made through the chief of the Bureau of Plant Industry, forming part of his annual report for 1901. See A1.1:901, p. 67; also A19.1:901, p. 67.]

**A3.2: General publications**

[Publications which originated in this Division, but which were published in a numbered series of Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of the Division issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

**A3.3: Bulletins**

- 1 No. 1. Grasses and forage plants of the Southeastern States; by Thomas H. Kearney, jr. 1895. 28 pp.



## Tables

Classifica-  
tion no.

## A3. AGROSTOLOGY DIVISION—Continued

### A3.3: Bulletins—Continued

- 2<sup>1</sup> No. 2. Fodder and forage plants exclusive of grasses; by Jared G. Smith. 1896. 58 pp.
- 2<sup>2</sup> Same. Revised ed. 1900. 86 pp. 2 pl.
- 3 No. 3. Useful and ornamental grasses; by F. Lamson-Scribner. 1896. 119 pp.
- 4 No. 4. Studies on American grasses; by F. Lamson-Scribner, Jared G. Smith, and Theo. Holm. 1897. 43 pp. 5 pl.
- 5 No. 5. Grasses and forage plants of Rocky Mountain region; by P. A. Rydberg and C. L. Shear. 1897. 48 pp.
- 6 No. 6. Grasses and forage plants of the Dakotas; by Thomas A. Williams. 1897. 47 pp.
- 7<sup>1</sup> No. 7. American grasses; by F. Lamson-Scribner. 1897. 331 pp.
- 7<sup>2</sup> No. 7. American grasses, 1. Rev. ed. 1898. 331 pp.
- 7<sup>3</sup> Same, 3d ed. 1900. 319 pp.
- 8 No. 8. Studies on American grasses; by F. Lamson-Scribner and Miss E. L. Ogden. 1897. 23 pp. 9 pl.
- 9 No. 9. Grasses and forage plants of Iowa, Nebraska, and Colorado; by L. H. Pammel. 1897. 47 pp.
- 10 No. 10. Grasses and forage plants of central Texas; by H. L. Bentley. 1898. 38 pp.
- ✓ 11 No. 11. Studies on American grasses; by Thomas H. Kearney, jr., and F. Lamson-Scribner. 1898. 62 pp. 17 pl.
- 12 No. 12. Grasses and forage plants and forage conditions of eastern Rocky Mountain region; by Thomas A. Williams. 1898. 78 pp.
- 13 No. 13. Red Desert of Wyoming and its forage resources; by Aven Nelson. 1898. 72 pp. 5 pl.
- 14<sup>1</sup> No. 14. Economic grasses; by F. Lamson-Scribner. 1898. 85 pp. 3 pl.
- 14<sup>2</sup> Same, rev. 1900. 85 pp. 3 pl.
- 15 No. 15. Forage plants and forage resources of Gulf States; by S. M. Tracy. 1898. 55 pp.
- 16 No. 16. Grazing problems in Southwest and how to meet them; by Jared G. Smith. 1899. 47 pp.
- 17<sup>1</sup> No. 17. American grasses, 2; by F. Lamson-Scribner. 1899. 349 pp.
- 17<sup>2</sup> Same, rev. ed. 1901. 349 pp.
- ✓ 18 No. 18. Studies on American grasses; synopsis of genus sitanion; by J. G. Smith. 1899. 21 pp. 4 pl.
- 19<sup>1</sup> No. 19. Structure of caryopsis of grasses, with reference to morphology and classification; by P. Beveridge Kennedy. 1899. 44 pp. 8 pl.
- 19<sup>2</sup> Same, revised. 1900. 44 pp. 8 pl.
- 20<sup>1</sup> No. 20. American grasses, 3; by F. Lamson-Scribner. 1900. 197 pp.
- 20<sup>2</sup> Same, rev. ed. 1900. 197 pp.
- 21 No. 21. Studies on American grasses; North American species of chætochloa; by F. Lamson-Scribner and Elmer D. Merrill. 1900. 44 pp.
- 22 No. 22. Cooperative experiments with grasses and forage plants; by P. Beveridge Kennedy. 1900. 86 pp. 13 pl.
- 23 No. 23. Studies on American grasses: a revision of North American species of bromus occurring north of Mexico; by Cornelius L. Shear. 1900. 66 pp.
- 24 No. 24. Studies on American grasses; by F. Lamson-Scribner, Elmer D. Merrill, and Carleton R. Ball. 1900. 55 pp.
- 25 No. 25. Field work of Division of Agrostology; review and summary of work done since organization of division, July 1, 1895; by Cornelius L. Shear. 1901. 67 pp. 28 pls. 8 maps.

### A3.4: Circulars

- 1 No. 1. Note on experimental grass gardens; by Jared G. Smith. Aug. 6, 1895. n. t. p. 4 pp.
- 2 No. 2. Hairy vetch, sand vetch, or Russian vetch; by F. Lamson-Scribner. Oct. 1, 1895. n. t. p. 4 pp.
- 3 No. 3. Saltbushes; by Jared G. Smith. Mar. 13, 1896. n. t. p. 4 pp.
- 4<sup>1</sup> No. 4. Renewing of worn-out native prairie pastures; by Thomas A. Williams. Nov. 2, 1896. n. t. p. 4 pp.

Classifica-  
tion no.**A3. AGROSTOLOGY DIVISION—Continued****A3.4: Circulars—Continued**

- 4<sup>2</sup> Same, revised. Nov. 15, 1897. n. t. p. 4 pp.
- 5<sup>1</sup> No. 5. Cowpeas; by Jared G. Smith. Nov. 26, 1897. n. t. p. 10 pp.
- 5<sup>2</sup> Same, rev. ed. Mar. 25, 1898. n. t. p. 11 pp.
- 6<sup>1</sup> No. 6. Cultivated vetches; by Jared G. Smith. Feb. 25, 1898. n. t. p. 7 pp.
- 6<sup>2</sup> Same, rev. ed. Apr. 15, 1898. n. t. p. 8 pp.
- ✓ 7 No. 7. Gram, chick-pea, or Idaho pea; by Jared G. Smith. Nov. 18, 1898. n. t. p. 4 pp.
- 8 No. 8. Experiments in range improvements; by Jared G. Smith. Dec. 27, 1898. n. t. p. 5 pp.
- 9 No. 9. New species of North American grasses; by F. Lamson-Scribner. Feb. 15, 1899. n. t. p. 7 pp.
- ✓ 10 No. 10. *Poa fendleriana* and its allies; by Thomas A. Williams. Apr. 15, 1899. n. t. p. 6 pp.
- 11 No. 11. Flat pea; by F. Lamson-Scribner. Apr. 28, 1899. n. t. p. 6 pp.
- 12 No. 12. Rape as a forage plant; by Thomas A. Williams. May 5, 1899. n. t. p. 6 pp.
- 13 No. 13. Florida beggar weed, also known as Beggar weed, Florida clover, Giant Beggar weed; by Jared G. Smith. May 6, 1899. n. t. p. 5 pp.
- 14 No. 14. Velvet bean; by Jared G. Smith. May 13, 1899. n. t. p. 5 pp.
- ✓ 15 No. 15. Recent additions to systematic agrostology. July 14, 1899. n. t. p. 10 pp.
- ✓ 16 No. 16. New species of North American grasses; by F. Lamson-Scribner. July 1, 1899. n. t. p. 6 pp.
- 17 No. 17. Crimson clover; by Thomas A. Williams. Aug. 19, 1899. n. t. p. 6 pp.
- 18 No. 18. Smooth brome-grass; by P. Beveridge Kennedy. Dec. 1, 1899. n. t. p. 9 pp.
- ✓ 19 No. 19. New or little known Mexican grasses; by F. Lamson-Scribner. Dec. 19, 1899. n. t. p. 4 pp.
- 20 No. 20. Experiments with forage plants in Ontario; by P. Beveridge Kennedy. Dec. 15, 1899. n. t. p. 3 pp.
- 21 No. 21. Cooperative range grass and forage plant experiments at Highmore, South Dakota; by F. Lamson-Scribner. Dec. 20, 1899. n. t. p. 10 pp.
- 22 No. 22. Grass and forage plant investigations on the Pacific Coast; by F. Lamson-Scribner. Dec. 22, 1899. n. t. p. 7 pp.
- 23 No. 23. Progress of experiments in forage crops and range improvement at Abilene, Texas; by H. L. Bentley. Dec. 30, 1899. n. t. p. 20 pp.
- 24 No. 24. Cowpeas and corn for silage and fodder; by W. Gettys. Feb. 26, 1900. n. t. p. 10 pp.
- 25<sup>1</sup> No. 25. Turkestan alfalfa; by P. Beveridge Kennedy. Apr. 9, 1900. n. t. p. 20 pp.
- 25<sup>2</sup> Same, rev. [Aug. 1900.] n. t. p. 20 pp.
- 26 No. 26. Rescue grass; by Cornelius L. Shear. May 21, 1900. n. t. p. 4 pp.
- 27 No. 27. Agrostological notes: Grasses of herbarium of Dr. H. Muhlenberg, by F. Lamson-Scribner and Elmer D. Merrill; Two new species of *Eatonia*, etc. Dec. 4, 1900. n. t. p. 10 pp.
- 28 No. 28. Grasses and fodder plants on Potomac flats; by C. R. Ball. Dec. 13, 1900. n. t. p. 18 pp.
- 29 No. 29. Grasses in Elliott's "Sketch of Botany of South Carolina and Georgia"; by F. Lamson-Scribner. [1901.] n. t. p. 12 pp.
- 30 No. 30. New or little known grasses; by F. Lamson-Scribner. Mar. 8, 1901. n. t. p. 8 pp.
- 31 No. 31. Bermuda grass; by A. S. Hitchcock. Mar. 21, 1901. n. t. p. 6 pp.
- 32 No. 32. Some Arizona grasses; by Elmer D. Merrill. Apr. 22, 1901. n. t. p. 10 pp.
- 33 No. 33. Range grass and forage plant experiments at Highmore, S. Dak., report of progress; by F. Lamson-Scribner. April 2, 1901. n. t. p. 5 pp.



## Tables

Classifica-  
tion no.

### A3. AGROSTOLOGY DIVISION—Continued

#### A3.4: Circulars—Continued

- 34 No. 34. *Aristida purpurea* Nutt., and its allies; by Elmer D. Merrill. May 24, 1901. n. t. p. 8 pp.
- 35 No. 35. Agrostological notes; by F. Lamson-Scribner and Elmer D. Merrill. June 18, 1901. n. t. p. 6 pp.
- 36 No. 36. List of publications of Division of Agrostology; by F. Lamson-Scribner. June 12, 1901. n. t. p. 8 pp.

### A4. ANIMAL INDUSTRY BUREAU

[For historical sketch of Bureau, see Yearbook, 1897 (A1.10:897), p. 236.]

#### A4.1: Annual reports

[The "also" references are to an abbreviated report of the chief without accompanying documents. From 1877 to 1883 reports on contagious diseases of domestic animals accompanied the annual reports of the Secretary. The report for 1881 and 1882 is designated in the running heading as a report of the Veterinary division, though that division was not formally organized until 1883. References to these reports will be found under "Domestic animals" and "Veterinary division" in the index to this work.]

- 884 1884, 1st (Salmon), 512 pp., 19 pl. (Also in A1.1:884, p. 181.)  
Same, 48th Cong., 2d sess., H. mis. doc. 25; serial no. 2311.
- 885 1885, 2d (Salmon), 662 pp., 11 pl. (Also in A1.1:885, p. 431.)  
Same, 48th Cong., 2d sess., H. mis. doc. 36; serial no. 2311.
- 886 1886, 3d (Salmon), 456 pp., 17 pl. (Also in A1.1:886, p. 593.)  
Same, 49th Cong., 2d sess., H. mis. doc. 156; serial no. 2493.
- 887-8 1887 and 1888, 4th and 5th (Salmon), 510 pp., 25 pl. (1887, also in A1.1:887, p. 457; 1888, also in A1.1:888, p. 145.)  
Same, 50th Cong., 2d sess., H. mis. doc. 139; serial no. 2665.
- 889-90 1889 and 1890, 6th and 7th (Salmon), 503 pp., 1 pl. (1889, also in A1.1:889, p. 49; 1890, also in A1.1:890, p. 75.)  
Same, 51st Cong., 1st sess., H. mis. doc. 270; serial no. 2801.
- 891-2 1890 and 1892, 8th and 9th (Salmon), 428 pp., 19 pl. (1891, also in A1.1:891, p. 83; 1892, also in A1.1:892, p. 85.)  
Same, 52d Cong., 2d sess., H. mis. doc. 120; serial no. 3138.
- 893-4 1893 and 1894, 10th and 11th (Salmon), 127 pp. (1893, also in A1.1:893, p. 123; 1894, also in A1.1:894, p. 103.)  
Same, 54th Cong., 1st sess., H. doc. 205; serial no. 3420.
- 895-6 1895 and 1896, 12th and 13th (Salmon), 362 pp., 38 pl. (1895, also in A1.1:895, p. 97; 1896, also in A1.1:896, p. 1.)  
Same, 54th Cong., 2d sess., H. doc. 291; serial no. 3537.
- 897 1897, 14th (Salmon), 727 pp., 6 pl. (Also in A1.1:897, p. 185.)  
Same, 55th Cong., 2d sess., H. doc. 578; serial no. 3680.
- 898 1898, 15th (Salmon), 647 pp., 25 pl., 1 map. (Also in A1.1:898, p. 179.)  
Same, 55th Cong., 3d sess., H. doc. 307; serial no. 3831.
- 899 1899, 16th (Salmon), 790 pp., 41 pl. (Also in A1.1:899, p. 243.)  
Same, 56th Cong., 1st sess., H. doc. 745; serial no. 4019.
- 900 1900, 17th (Salmon), 642 pp., 98 pl. (Also in A1.1:900, p. 211.)  
Same, 56th Cong., 2d sess., H. doc. 549; serial no. 4201.
- 901 1901, 18th (Salmon), 706 pp., 117 pl. (Also in A1.1:901, p. 15.)  
Same, 57th Cong., 1st sess., H. doc. 682; serial no. 4387.

[The Bureau also made an annual report to Congress of its employees, expenditures, and work, etc., no Bureau edition of which was issued. Following are the references to these reports as they appear in the Congressional set.]

- 1887, 50th Cong., 1st sess., S. ex. doc. 69; serial no. 2510.
- 1888, 50th Cong., 2d sess., H. mis. doc. 62; serial no. 2654.
- 1889, 51st Cong., 1st sess., S. ex. doc. 24; serial no. 2682.
- 1890, 51st Cong., 2d sess., S. ex. doc. 8; serial no. 2818.
- 1891, 52d Cong., 1st sess., S. ex. doc. 11; serial no. 2892.
- 1892, 52d Cong., 2d sess., S. ex. doc. 20; serial no. 3056.
- 1894, 53d Cong., 3d sess., S. ex. doc. 27; serial no. 3275.
- 1895, 54th Cong., 1st sess., H. doc. 96; serial no. 3414.
- 1896, 54th Cong., 2d sess., S. doc. 45; serial no. 3469.
- 1897, 55th Cong., 2d sess., H. doc. 227; serial no. 3680.
- 1899, 56th Cong., 1st sess., S. doc. 100; serial no. 3850.
- 1900, 56th Cong., 2d sess., S. doc. 96; serial no. 4033.

Classifica-  
tion no.

**A4. ANIMAL INDUSTRY BUREAU—Continued**

**A4.1<sup>a</sup>: Annual reports** (separates, reports of chief)

[The personal report of the chief is issued separately in pamphlet form.]

**A4.1<sup>a</sup>: Annual reports** (miscellaneous separates)

[The more important of the scientific papers accompanying the reports of the chief are issued separately in pamphlet form. References to *all* the scientific papers will be found under their proper headings in the index to this work.]

**A4.2: General publications**

[Publications which originated in this Bureau, but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the Index to this work. Publications of the Bureau issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

- Ad5** Animals. Contagious diseases of domesticated animals; investigations by Department of Agriculture, 1883-1884. 1884. 368 pp., 17 pl.
- B39** Beef supply of U. S., and export trade in animals and meat products; by D. E. Salmon. Advance sheets from annual report [of Secretary] 1889. 1890. 15 pp. (Special bulletin.)
- C29<sup>1</sup>** Cattlemen. Proceedings of interstate convention of cattlemen, held at Fort Worth, Texas, March 11-13, 1890. 1890. 102 pp. (Special bulletin.)
- C29<sup>2</sup>** Cattle. Special report on diseases of cattle and cattle feeding; by Drs. Murray, Atkinson, Harbaugh, Lowe, Law, Dickson, Trumbower, Smith, and Professor Henry. 1892. 496 pp. 44 pl.  
Same, 52d Cong., 2d sess., H. mis. doc. 106; serial no. 3125.
- C29<sup>3</sup>** Same, reprint, 1896. 496 pp. 44 pl.
- D14** Dairy. Fifty dairy rules; reprinted from Farmers' bulletin 63. (Placard.)
- F48** Filled cheese. [Notice of passage of filled-cheese bill.] June 10, 1896. (Circ.)  
[To accompany Circular 11 (A4.4:11.)]
- F73** Foot-and-mouth disease. Instructions concerning inspection for foot-and-mouth disease. Dec. 3, 1902. n. t. p. 3 pp.
- F82** Fowl cholera. Report on prevention of fowl cholera; by D. E. Salmon.; Feb. 23, 1881. n. t. p. 2 pp. 4°.
- H78<sup>1</sup>** Horse. Special report on diseases of the horse; by Drs. Michener, Law, Harbaugh, Trumbower, Liautard, Holcombe, Hujdekoper, and Dickson. 1890. 560 pp. 44 pl.
- H78<sup>2</sup>** Same, reprint, 1896. 576 pp. 44 pl.
- P42** Pork. Instructions for microscopists in examination of pork for trichina. June 26, 1896. n. t. p. 2 l.
- Sh4<sup>1</sup>** Sheep. Animal parasites of sheep; by Cooper Curtice. 1890. 222 pp. 36 pl.
- Sh4<sup>2</sup>** Sheep. Special report on history and present condition of sheep industry of U. S.; by Ezra A. Carman, H. A. Heath, and John Minto. 1892. 1,000 pp. 96 pl.  
Same, 52d Cong., 2d sess., H. mis. doc. 105, serial no. 3124.
- Sw5** Swine plague. Special report on cause and prevention of swine plague, results of experiments conducted by Theobald Smith. 1891. 166 pp. 12 pl.

**A4.3: Bulletins**

- 1 No. 1. Investigations into nature, causation, and prevention of Texas or southern cattle fever; by Theobald Smith and F. L. Kilborne. 1893. 301 pp. 10 pl.
- 2 No. 2. Investigations relating to treatment of lumpy jaw or actinomycosis in cattle; by D. E. Salmon. 1893. 90 pp. 8 pl.
- 3 No. 3. Miscellaneous investigations concerning infectious and parasitic diseases of domesticated animals; conducted by F. L. Kilborne, Veranus A. Moore, E. C. Schroeder, Theobald Smith, and C. W. Stiles. 1893. 86 pp. 3 pl.
- 4 No. 4. Revision of the adult cestodes of cattle, sheep, and allied animals; by C. W. Stiles and Albert Hassall. 1893. 134 pp. 16 pl.
- 5 No. 5. Dairy industry of Denmark; by C. C. Georgeson. 1893. 133 pp.

# Tables

Classification  
no.

## A4. ANIMAL INDUSTRY BUREAU—Continued

### A4.3: Bulletins—Continued

- |                 |  |
|-----------------|--|
| 6               | No. 6. Additional investigations concerning infectious swine diseases; [articles] by Theobald Smith and Veranus A. Moore. 1894. 117 pp.  |
| 7               | No. 7. Investigations concerning bovine tuberculosis, with special reference to diagnosis and prevention. 1894. 178 pp. 6 pl.  |
| 8               | No. 8. Investigations concerning infectious diseases among poultry; [articles] by Theobald Smith and Veranus A. Moore. 1895. 90 pp. 6 pl.  |
| 9               | No. 9. Rules and regulations governing operations of Bureau of Animal Industry; also acts of Congress under which they are made. 1895. 46 pp.  |
| 10              | No. 10. Cornstalk disease and rabies in cattle; [articles] by Veranus A. Moore and E. A. de Schweinitz. 1896. 92 pp. 2 pl.   |
| 11              | No. 11. Statistics of the dairy; compiled from U. S. Census, 1890, and other reliable sources by Henry E. Alvord. 1896. 53 pp.   |
| 12              | No. 12. Tapeworms of poultry; report [by] Ch. Wardell Stiles [and] Bibliography, [by] Albert Hassall. 1896. 88 pp. 22 pl.  |
| 13              | No. 13. Tuberculosis investigations; [articles] by E. A. de Schweinitz, Marion Dorset, and E. C. Schroeder. 1896. 27 pp. 2 pl.   |
| 14              | No. 14. Dairying in California; by E. J. Wickson. 1896. 31 pp.   |
| 15              | No. 15. Cheese industry of State of New York; by B. D. Gilbert. 1896. 54 pp.   |
| 16              | No. 16. Dairy industry in Nebraska, South Dakota, and North Dakota; by John H. Monrad. 1896. 21 pp.  |
| 17              | No. 17. Dairy schools; by R. A. Pearson. 1896. 38 pp. 4 pl.  |
| 18              | No. 18. Dairy industry in Missouri and Kansas; by Levi Chubbuck. 1897. 23 pp.  |
| 19              | No. 19. Inspection of meats for animal parasites; [articles by] Ch. Wardell Stiles and Albert Hassall. 1898. 161 pp.<br>Same, 55th Cong., 2d sess., H. doc. 338; serial no. 3680.  |
| 20              | No. 20. Milk supply of Boston and other New England cities; by George M. Whittaker. 1898. 37 pp. 3 pl.   |
| 21 <sup>1</sup> | No. 21. Sheep scab: its nature and treatment; by D. E. Salmon and Ch. Wardell Stiles. 1898. 64 pp. 6 pl.   |
| 21 <sup>2</sup> | Same, revised. 1900. 64 pp. 6 pl.  |
| 22              | No. 22. Proceedings of second annual meeting of association of experiment station veterinarians, held at Omaha, Nebr., Sept. 8, 1898. 1898. 29 pp.   |
| 23 <sup>1</sup> | No. 23. Serum treatment of swine plague and hog cholera; by E. A. de Schweinitz, with collaboration of Marion Dorset and E. C. Schroeder. 1899. 18 pp.   |
| 23 <sup>2</sup> | Same, by E. A. de Schweinitz, with collaboration of Marion Dorset. 1899. 18 pp.  |
| 24              | No. 24. Notes upon dairying in California and export of California butter to Orient; by R. A. Pearson. 1900. 29 pp. 4 pl.  |
| 25              | No. 25. Rabies. Report of committee on Public Health of Medical Society of District of Columbia. 1900. 29 pp.  |
| 26              | No. 26. National and State dairy laws; compiled and abstracted by R. A. Pearson. 1900. 100 pp.   |
| 27              | No. 27. Information concerning Angora goat; by George Fayette Thompson. 1901. 94 pp. 17 pls.   |
| 28              | No. 28. Legislation with reference to bovine tuberculosis, being digest of laws now in force, and transcript of laws, rules and regulations, and proclamations for the several States and Territories; [compiled] by D. E. Salmon. 1901. 173 pp. |
| 29              | No. 29. American breeds of fowls; 1. Plymouth Rock; by T. F. McGrew. 1901. 32 pp. 6 pl.  |
| 30              | No. 30. Trichinosis in Germany, Parts 1-3, [articles] by Ch. Wardell Stiles; pt. 4, Bibliography, by Albert Hassall, 1901. 211 pp.   |
| 31              | No. 31. American breeds of fowls; 2. Wyandotte; by T. F. McGrew. 1901. 30 pp. 10 pl.   |
| 32              | No. 32. Tuberculin test of imported cattle; by D. E. Salmon. 1901. 22 pp.  |

Classification  
no.

**A4. ANIMAL INDUSTRY BUREAU—Continued**

**A4.3: Bulletins—Continued**

- 33 No. 33. Relation of bovine tuberculosis to public health; by D. E. Salmon. 1901. 36 pp.
- 34 No. 34. American breeds of beef cattle, with remarks on pedigrees; by George M. Rommel. 1902. 34 pp. 23 pl.
- 35 No. 35. Eleven miscellaneous papers on animal parasites. 1902. 61 pp. 5 pls.
- 36 No. 36. Apoplectic form septicemia in chickens. Preliminary report on a highly fatal disease caused by nonpyogenic streptococcus; by Victor A. Nørgaard and John R. Mohler. 1902. 24 pp. 4 pl.
- 37 No. 37. Market classes of horses; by George M. Rommel. 1902. 32 pp. 12 pl.
- No. 38. Not issued 1902.
- 39 No. 39. Index catalogue of medical and veterinary zoology, pt. 1. Authors: A to Azevedo; by Ch. Wardell Stiles and Albert Hassall. 1902. 46 pp.
- 40 No. 40. Description and treatment of scabies in cattle; by Richard W. Hickman. 1902. 23 pp. 1 pl.  
[Identical with A1.9:152.]
- 41 No. 41. Mexico as a market for pure-bred beef cattle from U. S.; by D. E. Salmon. 1902. 28 pp. 1 map.
- 42 No. 42. Emergency report on surra, by D. E. Salmon and Ch. Wardell Stiles; with bibliography of surra and allied trypanosomatic diseases, by Albert Hassall. 1902. 152 pp. 16 pl.
- 43 No. 43. State and Territorial laws relating to contagious and infectious diseases of animals, 1901. 1902. 72 pp.

**A4.4: Circulars**

- 1<sup>1</sup> [No. 1. Directions for sterilization of milk.] Dec. 19, 1893. (Circ.)
- 1<sup>2</sup> Same, 2d ed. July 24, 1894. (Circ.)
- 1<sup>3</sup> No. 1. Same. [3d ed.] Dec. 19, 1893 [1896]. (Circ.)
- 1<sup>4</sup> No. 1. Directions for pasteurization of milk; revised Nov. 15, 1897. (Circ.)
- 2 No. 2. Wheat as a food for growing and fattening animals; by D. E. Salmon. n. d. n. t. p. 4 pp.
- 3 No. 3. Nodular taeniasis in fowls; by Veranus A. Moore. Aug. 28, 1895. n. t. p. 4 pp.
- 4 No. 4. Crossing improved breeds of swine with the common hogs of Florida; by Robt. W. Furnas. Dec. 28, 1895. n. t. p. 3 pp.
- 5 No. 5. Direct transmission of infectious entero-hepatitis in turkeys; by Veranus A. Moore. Mar. 11, 1896. n. t. p. 8 pp.
- 6 No. 6. Black quarter; by D. E. Salmon. n. d. n. t. p. 4 pp.
- 7 No. 7. Actinomycosis, or lumpy jaw; by D. E. Salmon. n. d. n. t. p. 4 pp.
- 8 No. 8. Injuries to cattle from swallowing pointed objects; by Theobald Smith and Charles F. Dawson. n. d. n. t. p. 4 pp.
- ✓ 9 No. 9. Checklist of animal parasites of chickens; by Albert Hassall. Mar. 25, 1896, with addendum, Apr. 10, 1896. n. t. p. 7 pp.
- ✓ 10 No. 10. List of State dairy commissioners and associations of dairymen in the U. S. and Canada, 1896; by Henry E. Alvord. Mar. 30, 1896. n. t. p. 6 pp.
- ✓ 11 No. 11. How to select good cheese; by Henry E. Alvord. Apr. 20, 1896. n. t. p. 11 pp.  
[For notice to accompany, see A4.2:F48.]
- ✓ 12 No. 12. Checklist of animal parasites of turkeys; by Albert Hassall. Apr. 29, 1896. n. t. p. 3 pp.
- ✓ 13 No. 13. Checklist of animal parasites of ducks; by Albert Hassall. May 14, 1896. n. t. p. 7 pp.
- ✓ 14 No. 14. Checklist of animal parasites of geese; by Albert Hassall. June 15, 1896. n. t. p. 5 pp.
- ✓ 15 No. 15. Checklist of animal parasites of pigeons; by Albert Hassall. July 21, 1896. n. t. p. 4 pp.
- ✓ 16 No. 16. Correspondence defining "filled cheese." Sept. 1, 1896. n. t. p. 2 pp.

## Tables

Classifica-  
tion no.

### A4. ANIMAL INDUSTRY BUREAU—Continued

#### A4.4: Circulars—Continued

- 17 No. 17. Exports of animals and their products; by D. E. Salmon. Jan. 21, 1897. n. t. p. 3 pp.
- 18 No. 18. List of officials and associations connected with dairy interests in U. S. and Canada for 1897; by Henry E. Alvord. Apr. 10, 1897. n. t. p. 8 pp.
- 19 No. 19. Factory cheese and how it is made; by G. Merry. n. d. n. t. p. 8 pp.
- ✓ 20 No. 20. Preventive vaccination against blackleg; by D. E. Salmon. n. t. p. 2 pp.
- ✓ 21 No. 21. Directions for use of blackleg vaccine; by [Victor E. Nørgaard]. Aug. 3, 1897. n. t. p. 8 pp.  
[No. 23, 2d revision, is issued under identical title.]
- 22 No. 22. List of officials connected with dairy interests, 1898; by Henry E. Alvord. Mar. 1, 1898. n. t. p. 8 pp.
- 23<sup>1</sup> No. 23. Blackleg: its nature, cause, and prevention; by Victor A. Nørgaard. Mar. 12, 1898. n. t. p. 12 pp.
- 23<sup>2</sup> Same, rev. ed. Feb. 11, 1899. n. t. p. 15 pp.
- 23<sup>3</sup> Same, 2d revision. Apr. 21, 1900. n. t. p. 8 pp.  
[Title changed to "Directions for use of blackleg vaccine"; identical with A4.4:21.]
- 24 No. 24. Colored spots in cheese; by R. A. Pearson. July 22, 1898. n. t. p. 7 pp.
- 25<sup>1</sup> No. 25. State standards for dairy products. 1898. Oct. 31, 1898. (Circ.)
- 25<sup>2</sup> Same, revised. Mar. 1, 1902. n. t. p. 3 pp.
- 26 No. 26. Officials, associations, and educational institutions connected with dairy interests of U. S. for year 1899; by Henry E. Alvord. Mar. 1, 1899. n. t. p. 8 pp.
- 27<sup>1</sup> No. 27. Scales of points in use in U. S. for judging dairy breeds of cattle; reprinted from 15th annual report of Bureau of Animal Industry. 1899. 16 pp.
- 27<sup>2</sup> Same, revised. May 8, 1900. n. t. p. 16 pp.
- 28 No. 28. Letters relating to distribution of vaccine. [1900.] n. t. p. 9 pp.
- 29 No. 29. Officials, associations, and educational institutions connected with dairy interests for 1900; by Henry E. Alvord. Feb. 24, 1900. n. t. p. 10 pp.
- 30 No. 30. Rabies in District of Columbia; by D. E. Salmon. Apr. 30, 1900. n. t. p. 15 pp.
- 31<sup>1</sup> No. 31. Blackleg, its nature, cause, and prevention; by Victor A. Nørgaard. June 5, 1900. n. t. p. 22 pp.
- 31<sup>2</sup> Same, revised. Nov. 10, 1900. n. t. p. 23 pp.
- 32 No. 32. Imperial German meat inspection law. Feb. 15, 1901. n. t. p. 19 pp.
- 33 No. 33. Officials, associations, and educational institutions connected with dairy interests of U. S., 1901; by Henry E. Alvord. Feb. 23, 1901. n. t. p. 8 pp.
- 34 No. 34. Notes on parasites, 55-57; by Ch. Wardell Stiles and Albert Hassall. Mar. 26, 1901. n. t. p. 4 pp.
- 35 No. 35. Treatment of roundworms in sheep, goats, and cattle; by Ch. Wardell Stiles. July 24, 1901. n. t. p. 8 pp.
- 36 No. 36. Officials, associations, and educational institutions connected with dairy interests of U. S., 1902; by Henry E. Alvord. Mar. 1, 1902. n. t. p. 8 pp.
- 37 No. 37. Preliminary report on Argentina as a market for pure-bred cattle from U. S.; by D. E. Salmon. Apr. 26, 1902. n. t. p. 4 pp.
- 38 No. 38. Foot-and-mouth disease, warning to all owners of cattle, sheep, and swine; by D. E. Salmon. Dec. 4, 1902. n. t. p. 3 pp.

#### A4.5: B. A. I. Orders (signed by Secretary of Agriculture)

[From July 1, 1885, to Feb. 19, 1897, ninety circular orders were issued without numbers. The full text of these orders is given in the 14th annual report of the Bureau of Animal Industry, 1897, beginning at p. 324 (A4.1:897).]

- 1 No. 1. Exportation of beef. Mar. 9, 1897. (Circ.)
- 2<sup>1</sup> No. 2. Modifying quarantine line for California. Mar. 19, 1897. (Circ.)

Classification  
no.

**A4. ANIMAL INDUSTRY BUREAU—Continued**

**A4.5: B. A. I. Orders—Continued**

- 2<sup>1</sup> Same, amended. July 17, 1897. (Circ.)
- 3 No. 3. Modifying quarantine line for Oklahoma. (Amendment.) Apr. 26, 1897. (Circ.)
- 4 No. 4. Concerning cattle transportation. May 17, 1897. (Amendment to order dated Jan. 27, 1897.) (Circ.)
- 5 No. 5. Transportation of sheep affected with scabies. June 18, 1897.
- 6<sup>1</sup> No. 6. Placing counties in Texas in quarantine. July 6, 1897. (Circ.)
- 6<sup>2</sup> Same, amended. July 13, 1897. (Circ.)
- 7 No. 7. Placing counties in Tennessee in quarantine. Aug. 16, 1897. (Circ.)
- 8-14 No. 8. Concerning cattle transportation, 1898. Dec. 15, 1897. Nos. 9-14. [Supplementary quarantine regulations, 1898.] Dec. 16, 1897. n. t. p. 9 pp.
- 15 No. 15. Cattle transportation, feeding stations at Fort Worth, Tex., and Salisbury, N. C. Jan. 3, 1898. (Amendment to no. 8.) (Circ.)
- 16 No. 16. Cattle transportation, suspending no. 8. Jan. 22, 1898. (Circ.)
- 17 No. 17. Cattle transportation, amendment to no. 8. Mar. 4, 1898. (Circ.)
- 18 No. 18. Modifying quarantine line for California; supersedes and revokes no. 9. Mar. 25, 1898. (Circ.)
- 19 No. 19. Safe transport of cattle to foreign countries. May 11, 1898. (Amendment to section 18 of order dated Feb. 18, 1895.) (Circ.)
- 20 No. 20. Placing certain counties in Texas in quarantine (additional to no. 10). Aug. 17, 1898. (Circ.)
- 21 No. 21. Releasing cattle in counties of Union, Towns, and part of Rabun, Ga., from restrictions. Sept. 7, 1898. (Circ.)
- 22 No. 22. Placing counties in Texas in quarantine (additional to no. 10). Sept. 30, 1898. (Circ.)
- 23 No. 23. Modifying no. 8. Oct. 12, 1898. (Circ.)
- 24 No. 24. Concerning cattle transportation. Dec. 19, 1898. n. t. p. 4 pp.
- 25-29 Nos. 25-29. Supplementary quarantine regulations, 1899. Dec. 20, 1898. n. t. p. 6 pp.
- 30 No. 30. Placing certain counties in Texas in quarantine (additional to no. 25). Jan 9, 1899. (Circ.)
- 31 No. 31. Concerning cattle transportation (amendment to no. 24). Jan. 9, 1899. (Circ.)
- 32 No. 32. Concerning cattle transportation (amendment to no. 24). Mar. 8, 1899. (Circ.)
- 33<sup>1</sup> No. 33. Rules and regulations for inspection of live stock, etc. Mar. 15, 1899. n. t. p. 9 pp.
- 33<sup>2</sup> Same, with general instructions to inspectors, etc. Mar. 15, 16, 1899. n. t. p. 17 pp. 16°. [Title on cover M[eat] I[n]spection] rules and regulations and instructions.]
- 33<sup>3</sup> No. 33. Amendment no. 2. June 21, 1902. (Circ.)  
[For amendment no. 1, see A4.5:78.]
- 34 No. 34. Concerning cattle transportation (amendment to no. 29). Mar. 25, 1899. (Circ.)
- 35<sup>1</sup> No. 35. Inspection and safe transport of animals to foreign countries. May 1, 1899. n. t. p. 11 pp.
- 35<sup>2</sup> Same, modifications and extension. Sept. 11, 1899. (Circ.)
- 36 No. 36. Placing certain counties in Texas in quarantine (additional to no. 25 and no. 30). June 27, 1899. (Circ.)
- 37 No. 37. Providing for return to non-infected district of cattle exhibited at State fair, Raleigh, North Carolina (supplementary to no. 24). July 18, 1899. (Circ.)
- 38 No. 38. Dipping of sheep affected with scabies. July 20, 1899. (Circ.)
- 39 No. 39. Inspection and certification of graded cattle for Cuba. July 21, 1899. 3 pp. (half title.)
- 40 No. 40. Revocation of no 39. July 28, 1899. (Circ.)
- 41 No. 41. Releasing cattle in counties of Union, Towns, and part of Rabun, Ga., from restrictions of no. 24. Aug. 1, 1899. (Circ.)
- 42 No. 42. Placing Washita County, Okla., in quarantine (additional to no. 26). Aug. 4, 1899. (Circ.)



# Tables

Classification  
no.

## A4. ANIMAL INDUSTRY BUREAU—Continued

### A4.5: B. A. I. Orders—Continued

- |                  |  |
|------------------|--|
| 43               | No. 43. Providing for return to noninfected district of cattle exhibited at State fair, Sacramento, Cal. (supplementary to no. 24). Aug. 28, 1899. (Circ.)                 |
| 44               | No. 44. Providing additional ports of export for Canadian cattle in bond. Aug. 28, 1899. (Circ.)   |
| 45               | No. 45. Modifying quarantine line for California (amendment to no. 24). Aug. 30, 1899. (Circ.)   |
| 46 <sup>1</sup>  | No. 46. Superseding no. 35. Oct. 4, 1899. n. t. p. 11 pp.  |
| 46 <sup>2</sup>  | Same, amendment no. 1. Nov. 18, 1901. (Circ.)  |
| 47               | No. 47. Concerning cattle transportation (amendment to no. 24). Oct. 21, 1899. (Circ.)   |
| 48               | No. 48. Concerning movement of animals from districts in which rabies exists. Dec. 11, 1899. (Circ.)   |
| 49               | No. 49. Concerning cattle transportation. Dec. 16, 1899. n. t. p. 4 pp. (Also in A4.5:49-55.)  |
| 49-55            | No. 49. Concerning cattle transportation. Dec. 16, 1899. Nos. 50-55. Supplementary quarantine regulations. 1900. Dec. 19, 1899. n. t. p. 10 pp.                            |
| 56 <sup>1</sup>  | No. 56. Inspection and quarantine of horses, neat cattle, sheep, and other ruminants, and swine, imported. Dec. 28, 1899. n. t. p. 10 pp.                                  |
|                  | Same, Amendment no. 1. See A4.5:58.  |
|                  | Same, Amendment no. 2. See A4.5:64.  |
|                  | Same, Amendment no. 3. See A4.5:77.  |
|                  | Same, Amendment no. 4. See A4.5:79.  |
| 56 <sup>2</sup>  | Same, Amendment no. 5. [Cattle may be tested in Europe or Canada.] May 21, 1901. (Circ.)   |
| 56 <sup>3</sup>  | Same, Amendment no. 6. Oct. 4, 1901. (Circ.)   |
| 56 <sup>4</sup>  | Same, Amendment no. 7. Oct. 16, 1901. (Circ.)  |
| 56 <sup>5</sup>  | Same, Amendment no. 8. Nov. 23, 1901. (Circ.)  |
| 56 <sup>6</sup>  | Same, Amendment no. 9. Mar. 22, 1902. (Circ.)  |
| 56 <sup>7</sup>  | Same, Amendment no. 10. May 7, 1902. (Circ.)   |
| 56 <sup>8</sup>  | Same, Amendment no. 11. Aug. 20, 1902. (Circ.)   |
| 56 <sup>9</sup>  | Same, Amendment no. 12. Oct. 25, 1902. (Circ.)   |
| 56 <sup>10</sup> | Same, Amendment no. 13. Dec. 15, 1902. (Circ.)   |
| 57               | No. 57. Cattle transportation (amendment to no. 49). (Circ.) Jan. 20, 1900.  |
| 58               | No. 58. Inspection and quarantine of horses and other ruminants and swine imported into U. S. Modification of no. 56. Jan. 27, 1900. (Circ.)                               |
| 59               | No. 59. Releasing certain cattle in California from restrictions imposed by Order 49. Feb. 26, 1900. (Circ.)   |
| 60               | No. 60. Providing for return to noninfected district of cattle exhibited at State fair at Raleigh, N. C. Apr. 6, 1900. (Circ.)   |
| 61               | No. 61. Exportation of cattle and sheep in vessels carrying hides from foreign countries. Apr. 23, 1900. (Circ.)   |
| 62               | No. 62. Cattle transportation (amendment to no. 49). May 11, 1900. (Circ.)   |
| 63               | No. 63. Cattle transportation (amendment to no. 49). May 16, 1900. (Circ.)   |
| 64               | No. 64. Inspection and quarantine of horses and other ruminants and swine, imported into U. S. (amendment to no. 56). June 1, 1900. (Circ.)                                |
| 65               | No. 65. Providing for importation of Canadian cattle for exhibition purposes at Pan-American Exposition, Buffalo, N. Y. June 15, 1900. (Circ.)                             |
| 66               | No. 66. Regulations concerning cattle transportation (amendment to no. 49). July 13, 1900. (Circ.)   |
| 67               | No. 67. Providing for importation of Canadian cattle, sheep, and swine for exhibition purposes at International Livestock Exposition, Chicago, Ill. July 13, 1900. (Circ.) |
| 68               | No. 68. Revoking no. 63. Aug. 13, 1900. (Circ.)  |
| 69               | No. 69. Supplemental to nos. 55 and 59. Aug. 18, 1900. (Circ.)   |
| 70               | No. 70. Supplementary to no. 49. Aug. 20, 1900. (Circ.)  |
| 71               | No. 71. Revoking no. 66. Aug. 23, 1900. (Circ.)  |

Classification  
no.

**A4. ANIMAL INDUSTRY BUREAU—Continued**

**A4.5: B. A. I. Orders—Continued**

72	No. 72. Amendment to nos. 49 and 51. Aug. 29, 1900. (Circ.)
73	No. 73. Providing for exhibition of uninspected cattle at Golden Gate Fair (supplemental to nos. 55 and 59). Sept. 8, 1900. (Circ.)
74	No. 74. Amendment to nos. 49 and 51. Sept. 17, 1900. (Circ.)
75	No. 75. Amendment to nos. 49 and 50. Sept. 26, 1900. (Circ.)
76	No. 76. Amendment to no. 49. Oct. 9, 1900. (Circ.)
77	No. 77. Inspection and quarantine of horses and other ruminants, and swine, imported (amendment to no. 56). Oct. 20, 1900. (Circ.)
78	No. 78. Inspection of live stock and products (amendment to no. 33). Oct. 22, 1900. (Circ.)
79	No. 79. Inspection and quarantine of horses and other ruminants, and swine, imported (amendment to no. 56). Nov. 10, 1900. (Circ.)
80-87 <sup>1</sup>	No. 80. Regulations concerning cattle transportation; Nos. 81-87, supplementary quarantine regulations (amendments nos. 1-7). Dec. 10-14, 1900. n. t. p. 12 pp.
	See for amendment no. 8, A4.5:88; for amendment no. 9, A4.5:89.
80-87 <sup>2</sup>	Same, Amendment no. 10. Jan. 31, 1901. (Circ.)
80-87 <sup>3</sup>	Same, Amendment no. 11. Feb. 5, 1901. (Circ.)
80-87 <sup>4</sup>	Same, Amendment no. 12. Apr. 18, 1901. (Circ.)
80-87 <sup>5</sup>	Same, Amendment no. 13. Apr. 20, 1901. (Circ.)
80-87 <sup>6</sup>	Same, Amendment no. 14. July 13, 1901. (Circ.)
80-87 <sup>7</sup>	Same, Amendment no. 15. Aug. 21, 1901. (Circ.)
80-87 <sup>8</sup>	Same, Amendment no. 16. Oct. 3, 1901. (Circ.)
80-87 <sup>9</sup>	Same, Amendment no. 17. Oct. 15, 1901. (Circ.)
80-87 <sup>10</sup>	Same, Amendment no. 18. Oct. 22, 1901. (Circ.)
88	No. 88. Amendment to no. 80. Dec. 22, 1900. (Circ.)
89	No. 89. Amendment to no. 80. Dec. 22, 1900. (Circ.)
90	No. 90. Importation of Canadian cattle, sheep, and swine for exhibition at Chicago. Sept. 12, 1901. (Circ.)
91	No. 91. Rules and regulations for inspection and marking dairy products for export. Oct. 30, 1901. n. t. p. 3 pp.
92	No. 92. Prohibiting landing of animals from Philippine Islands. Dec. 13, 1901. (Circ.)
93 <sup>1</sup>	No. 93. Regulations concerning cattle transportation. Jan. 10, 1902. (Contains amendments 1-8 to no. 93, and changes in quarantine line for 1902.) n. t. p. 16 pp.
93 <sup>2</sup>	Same, Amendment no. 9. Jan. 23, 1902. (Circ.)
93 <sup>3</sup>	Same, Amendment no. 10. Feb. 13, 1902. (Circ.)
93 <sup>4</sup>	Same, Amendment no. 11. Mar. 1, 1902. (Circ.)
93 <sup>5</sup>	Same, Amendment no. 12. Mar. 14, 1902. (Circ.)
93 <sup>6</sup>	Same, Amendment no. 13. Apr. 16, 1902. (Circ.)
93 <sup>7</sup>	Same, Amendment no. 14. June 28, 1902. (Circ.)
93 <sup>8</sup>	Same, Amendment no. 15. July 30, 1902. (Circ.)
93 <sup>9</sup>	Same, Amendment no. 16. July 30, 1902. (Circ.)
93 <sup>10</sup>	Same, Amendment no. 17. Sept. 10, 1902. (Circ.)
93 <sup>11</sup>	Same, Amendment no. 18. Oct. 10, 1902. (Circ.)
93 <sup>12</sup>	Same, Amendment no. 19. Oct. 22, 1902. (Circ.)
94	No. 94. Rules and regulations in regard to "renovated butter," and information concerning "adulterated butter." June 21, 1902. n. t. p. 12 pp.
95	No. 95. Importation of Canadian animals for exhibition at State fair, Syracuse, N. Y. June 26, 1902. (Circ.)
96	No. 96. Importation of Canadian cattle, sheep, and swine for exhibition at International Live-stock Exhibition, Chicago. July 16, 1902. (Circ.)
97	No. 97. Extracts from existing laws, with rules and regulations as therein provided, prescribed for inspection and certification of renovated butter and other dairy products for export. Oct. 1, 1902. n. t. p. 6 pp.
	[Printed "No. 96," changed with rubber stamp to "No. 97."]
98	No. 98. Rules and regulations prescribed in regard to "renovated butter," in accordance with act of Congress approved May 9, 1902, and information concerning "adulterated butter." Nov. 1, 1902. n. t. p. 16 pp.



## Tables

Classification  
no.

### A4. ANIMAL INDUSTRY BUREAU—Continued

#### A4.5: B. A. I. Orders—Continued

- 99<sup>1</sup> No. 99. Quarantine of cattle, sheep, and other ruminants, and swine in New England States. Nov. 27, 1902. (Circ.)  
 99<sup>2</sup> Same, Amendment no. 1. Nov. 29, 1902. (Circ.)  
 99<sup>3</sup> Same, Amendment no. 2. Dec. 13, 1902. (Circ.)  
 99<sup>4</sup> Same, Amendment no. 3. Dec. 22, 1902. (Circ.)  
 100 No. 100. Prohibition of exportation of cattle, sheep, and other ruminants, and swine from port of Boston. Nov. 27, 1902. (Circ.)  
 101 No. 101 Concerning cattle transportation. Dec. 26, 1902. (Contains amendments nos. 1-9.) n. t. p. 15 pp.

#### A4.6: Map of districts infected with splenetic fever

- 891 1891, Feb. 5.  
 892 1892, Feb. 26.  
 893 1893, Feb. 15.  
 894 1894, Feb. 5.  
 895 1895, Feb. 5.  
 896 1896, June.  
 897 1897, Feb.  
 898 1898, Jan. 1.  
 899 1899, Jan. 1.  
 900 1900, Jan. 1.  
 901 1901, Jan. (in 5 sections).

### A5. BIOLOGICAL SURVEY

[Formerly known as Division of Ornithology and Mammalogy or Economic Ornithology and Mammalogy. For historical sketch of Division, see Yearbook, 1897 (A1.10:897), p. 115.]

#### A5.1: Annual reports

- ORNITHOLOGIST  
 886 1886 (Merriam), [1]+227-258 pp. 1 map. (Also in A1.1:886, p. 227.)  
 887 1887 (Merriam), iii+399-456+ii pp. 1 pl. (Also in A1.1:887, p. 399.)  
 ORNITHOLOGIST AND MAMMALOGIST  
 888 1888 (Merriam), iii+477-536 pp. 1 pl. (Also in A1.1:888, p. 477.)  
 889 1889 (Merriam), [1]+363-376 pp. 2 pl. (Also in A1.1:889, p. 363.)  
 890 1890 (Merriam), iii+277-285 pp. (Also in A1.1:890, p. 277.)  
 891 1891 (Merriam), [1]+267-271 pp. (Also in A1.1:891, p. 267.)  
 892 1892 (Merriam), [1]+181-200 pp., 5 pl. (Also in A1.1:892, p. 181.)  
 893 1893 (Merriam), iii+227-234 pp., 1 map. (Also in A1.1:893, p. 227.)  
 1894 (Merriam). (In A1.1:894, p. 227.)  
 1895 (Merriam). (In A1.1:895, p. 175.)  
 896 1896 (Merriam), iii+23-25 pp. (Also in A1.1:896, p. 23.)  
 DIVISION OF BIOLOGICAL SURVEY  
 897 1897 (Merriam), ii+15-20 pp. (Also in A1.1:897, p. 15.)  
 ACTING CHIEF, DIVISION OF BIOLOGICAL SURVEY  
 898 1898 (Palmer), iii+37-42 pp. (Also in A1.1:898, p. 37.)  
 899 1899 (Palmer), iii+59-70 pp. (Also in A1.1:899, p. 59.)  
 900 1900 (Palmer), ii+35-48 pp. (Also in A1.1:900, p. 35.)  
 901 1901 (Palmer), iii+151-162 pp. (Also in A1.1:901, p. 151.)  
 CHIEF OF BIOLOGICAL SURVEY  
 902 1902 (Merriam), iii+209-218 pp. (Also in A1.1:902, p. 209.)

#### A5.2: General publications

[Publications which originated in this division, but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of this division issued only as Congressional documents are noted in chronological order in the appendix to this work.]

#### A5.3: Bulletins

- 1 No. 1. English sparrow (*Passer domesticus*) in North America, especially in its relation to agriculture; by Walter B. Barrows. 1889. 405 pp. 1 map.  
 2 No. 2. Bird migration in Mississippi Valley, 1884 and 1885; by W. W. Cooke. Edited and revised by C. Hart Merriam. 1888. 313 pp. 1 map.

Classification  
no.**A5. BIOLOGICAL SURVEY—Continued****A5.3: Bulletins—Continued**

- 3 No. 3. Hawks and owls of U. S. in their relation to agriculture; by A. K. Fisher. 1893. 210 pp. 26 pl.
- 4 No. 4. Prairie ground squirrels, or spermophiles, of Mississippi Valley; by Vernon Bailey. 1893. 69 pp. 5 pl.
- 5 No. 5. Pocket gophers of U. S.; by Vernon Bailey. 1895. 47 pp. 2 pl.
- 6 No. 6. Common crow of U. S.; [articles] by Walter B. Barrows and E. A. Schwarz. 1895. 98 pp. 1 pl.
- 7 No. 7. Preliminary report on food of woodpeckers, by F. E. L. Beal; Tongues of woodpeckers, by F. A. Lucas. 1895. 44 pp. 4 pl.
- 8<sup>1</sup> No. 8. Jack rabbits of U. S.; by T. S. Palmer. 1896. 84 pp. 7 pl.
- 8<sup>2</sup> Same, revised ed. 1897. 88 pp. 7 pl.
- 9 No. 9. Cuckoos and shrikes in their relation to agriculture; Food of cuckoos, by F. E. L. Beal, [and] Food of shrikes, by Sylvester D. Judd. 1898. 26 pp. 1 pl.
- 10 No. 10. Life zones and crop zones of U. S.; by C. Hart Merriam. 1898. 79 pp. 1 map.
- 11 No. 11. Geographic distribution of cereals in North America; by C. S. Plumb. 1898. 24 pp. 1 map.
- 12<sup>1</sup> No. 12. Legislation for protection of birds other than game birds; by T. S. Palmer. 1900. 94 pp. 2 pl.
- 12<sup>2</sup> Same, revised ed., 1902. 143 pp. 4 pl.
- 13 No. 13. Food of bobolink, blackbirds, and grackles; by F. E. L. Beal. 1900. 77 pp. 1 pl.
- 14 No. 14. Laws regulating transportation and sale of game; by T. S. Palmer and H. W. Olds. 1900. 89 pp. 9 pl. 1 folder table.
- 15 No. 15. Relation of sparrows to agriculture; by Sylvester D. Judd. 1901. 98 pp. 4 pl.
- 16 No. 16. Digest of game laws for 1901; by T. S. Palmer and H. W. Olds. 1901. 152 pp. 8 pls. 2 folder tables.
- 17 No. 17. Birds of a Maryland farm, a local study of economic ornithology; by Sylvester D. Judd. 1902. 116 pp. 17 pl.

**A5.3<sup>a</sup>: Bulletins (separates)**

[A few of the more important papers contained in the Bulletins have been issued separately. References to all the papers will be found under their proper headings in the index to this work.]

**A5.4: Circulars**

- 1<sup>1</sup> No. 1. On food habits of birds. Out of print.\*
- 1<sup>2</sup> Same, 2d edition. Oct. 12, 1886. n. t. p. [3] pp.
- 2 No. 2. On English sparrow. July 20, 1886. (Circ.)
- 3 No. 3. On economic relations of mammals. July 27, 1886. n. t. p. [3] pp.
- 4 No. 4. [Leaflet relating to collection of birds' stomachs. Nov., 1886.] (Circ.)
- 5 No. 5. To rice growers. n. d. (Circ.)
- 6<sup>1</sup> No. 6. Acknowledgment of receipt of schedule on English sparrow. Out of print.\*
- 6<sup>2</sup> Same, 2d edition. n. d. (Circ.)
- 7 No. 7. To postmasters in relation to English sparrow. Nov. 8, 1886. (Circ.)
- 8 No. 8. On geographical distribution and migration of North American birds for 1887. Feb. 23, 1887. n. t. p. [4] pp.
- 9 No. 9. On gophers. July 30, 1888. (Circ.)
- 10 No. 10. On killdeer plover. Jan. 15, 1889. (Circ.)
- 11 No. 11. Brief directions for measurement of small mammals, and preparation of museum skins; by C. Hart Merriam. 1889. 4 pp. 1 pl.
- 12 No. 12. Directions for collecting the stomachs of birds. Apr. 25, 1891. n. t. p. [3] pp.
- 13 No. 13. [For acknowledging receipt of North American Fauna.] n. d. (Circ.)
- 14<sup>1</sup> No. 14. [For acknowledging receipt of North American Fauna 7.] n. d. (Circ.)
- 14<sup>2</sup> Same. [North American Fauna 8.] n. d. (Circ.)

\*No copy found.

## Tables

Classifica-  
tion no.

## A5. BIOLOGICAL SURVEY—Continued

### A5.4: Circulars—Continued

- 15 No. 15. [For acknowledging receipt of North American Fauna 10.] Jan. 1896. (Circ.)
- 16 No. 16. [For acknowledging receipt of North America Fauna 11.] July, 1896 (Circ.)
- 17<sup>1</sup> No. 17. Bird day in the schools. July 2, 1896. n. t. p. 4 pp.
- 17<sup>2</sup> Same, reprint with additions. n. t. p. 4 pp.
- 18 No. 18. [For acknowledging receipt of North American Fauna 12.] n. d. (Circ.)
- 19 No. 19. In relation to bounties on mammals and birds. n. d. (Circ.)
- 20 No. 20. Distribution and sale of publications. Oct. 20, 1896. n. t. p. 2 pp.
- 21 No. 21. Geographic distribution of North American cereals. Jan. 4, 1897 (Circ.)
- 22 No. 22. Geographic distribution of North American cereals. Mar. 1, 1897 (Circ.)
- 23 No. 23. [For acknowledging receipt of North American Fauna 13.] Oct., 1897. (Circ.)
- 24 No. 24. [For acknowledging receipt of North American Fauna 14.] May 1, 1899. (Circ.)
- 25 No. 25. [For acknowledging receipt of North American Fauna 15.] Aug 10, 1899. (Circ.)
- 26 No. 26. [For acknowledging receipt of North American Fauna 16.] Oct. 31, 1899. (Circ.)
- 27 No. 27. [For acknowledging receipt of North American Fauna 17.] May 31 [June 6], 1900. (Circ.)
- 28 No. 28. Directory of State officials and organizations concerned with protection of birds and game. July 10, 1900. n. t. p. 8 pp.
- 29 No. 29. Protection and importation of birds under act of Congress approved May 25, 1900. July 13, 1900. n. t. p. 6 pp.
- 30 No. 30. Wild animals and birds which may be imported without permits. Sept. 13, 1900. (Circ.)
- 31 No. 31. Information concerning game: Seasons, shipment, and sale; by T. S. Palmer and H. W. Olds. Oct. 25, 1900. n. t. p. 20 pp.
- 32<sup>1</sup> No. 32. Directions for destruction of prairie dogs; by C. Hart Merriam. Feb. 21, 1901. n. t. p. 2 pp.
- 32<sup>2</sup> Same, revised. Jan. 30, 1902. n. t. p. 2 pp.
- 33 No. 33. Protection of birds and game, directory of State officials and organizations for 1901; by T. S. Palmer. Apr. 18, 1901. n. t. p. 10 pp.
- 34 No. 34. Laws for protection of birds and game in District of Columbia; by T. S. Palmer. Oct. 25, 1901. n. t. p. 8 pp.
- 35 No. 35. Directory of State officials and organizations concerned with protection of birds and game, 1902; by T. S. Palmer. Apr. 15, 1902. n. t. p. 10 pp.
- 36 No. 36. Importation of reptiles into Hawaii, order for prevention of. [Amendment to circular no. 30] May 22, 1902. (Circ.)
- 37 No. 37. Regulations for importation of eggs of game birds for propagation. June 9, 1902. n. t. p. 2 pp.
- 38 No. 38. Interstate commerce in birds and game. Aug. 23, 1902. n. t. p. 3 pp.

### A5.5: North American fauna

- 1 No. 1. Revision of North American pocket mice; by C. Hart Merriam. 1889. vii+36 pp. 4 pl.
- 2 No. 2. Descriptions of fourteen new species and one new genus of North American mammals; by C. Hart Merriam. 1889. v+52 pp. 8 pl.
- 3 No. 3. Results of a biological survey of San Francisco mountain region and desert of the Little Colorado, Arizona; [articles] by C. Hart Merriam and Leonhard Stejneger. 1890. vii+136 pp. 14 leaves 14 pl. 5 maps.
- 4 No. 4. Descriptions of twenty-six new species of North American mammals; by C. H. Merriam. 1890. v+60 pp. 3 pl. 1 table.

Classifica-  
tion no.

## A5. BIOLOGICAL SURVEY—Continued

### A5.5: North American fauna—Continued

- 5 No. 5. Results of a biological reconnaissance of south central Idaho; [articles] by C. H. Merriam and Leonhard Stejneger; Descriptions of new genus and two new species of North American mammals, by C. Hart Merriam. 1891. vii+128 pp. 4 pl.
- No. 6. Death Valley expedition, pt. 1. Not published.
- 7 No. 7. Death Valley expedition, a biological survey of parts of California, Nevada, Arizona, and Utah, pt. 2; [reports by] A. K. Fisher [and others]. 1893. 402 pp. 19 pl.
- 8 No. 8. Monographic revision of the pocket gophers, family Geomyidæ, exclusive of species of Thomomys; by C. Hart Merriam. 1895. 258 pp. 23 pl.
- No. 9. Not published.
- 10 No. 10. Revision of shrews of American genera Blarina and Notiosorex, by C. Hart Merriam; Long-tailed shrews of eastern U. S., by Gerrit S. Miller, jr.; Synopsis of American shrews of genus Sorex, by C. Hart Merriam. 1895. 124 pp. 12 pl.
- 11 No. 11. Synopsis of weasels of North America; [by] C. Hart Merriam. 1896. 44 pp. 6 pl.
- 12 No. 12. Genera and subgenera of voles and lemmings; by Gerrit S. Miller, jr. 1896. 84 pp. 3 pl.
- 13 No. 13. Revision of North American bats of family Vespertilionidæ; by Gerrit S. Miller, jr. 1897. 140 pp. 3 pl.
- 14 No. 14. Natural history of Tres Marias Islands, Mexico; General account of islands, with reports on mammals and birds, by E. W. Nelson; Reptiles, by Leonhard Stejneger; Crustacea, by Mary J. Rathbun; Plants, by J. N. Rose; Bibliography, by E. W. Nelson. 1899. 97 pp. 1 pl.
- 15 No. 15. Revision of jumping mice of genus Zapus; by Edward A. Preble. 1899. 42 pp. 1 pl.
- 16 No. 16. Results of biological survey of Mt. Shasta, Cal.; by C. Hart Merriam. 1899. 179 pp. 5 pl.
- 17 No. 17. Revision of American voles of genus Microtus; by Vernon Bailey. 1900. 88 pp. 5 pl.
- 18 No. 18. Revision of pocket mice of genus Perognathus; by Wilfred H. Osgood. 1900. 72 pp. 4 pl.
- 19 No. 19. Results of a biological reconnaissance of Yukon River region; General account of region [and] annotated list of mammals, by Wilfred H. Osgood; Annotated list of birds, [by] Louis B. Bishop. 1900. 100 pp. 7 pl.
- 20 No. 20. Revision of skunks of genus Chinchilla; by Arthur H. Howell. 1901. 62 pp. 8 pl.
- 21 No. 21. Natural history of Queen Charlotte Islands, British Columbia; natural history of Cook Inlet region, Alaska; by Wilfred H. Osgood. 1901. 87 pp. 7 pl.
- 22 No. 22. Biological investigation of Hudson Bay region; by Edward A. Preble. 1902. 140 pp. 14 pl.

### A5.5<sup>a</sup>: North American fauna (separates)

[A few of the more important papers contained in the North American Fauna have been issued separately. References to all the papers will be found under their proper headings in the index to this work.]

## A6. BOTANY DIVISION

[Merged into Bureau of Plant Industry, July 1, 1901, see A 19. For historical sketch of Division, see Yearbook 1897 (A1.10:897), p. 90.]

### A6.1: Annual reports

- 1869 (Parry) (In A1.1:869, p. 91.)
- 1870 (Parry) (In A1.1:870, p. 108.)
- 1871 No report made.
- 1872 (Vasey) (In A1.1:872, p. 159.)
- 1873 No report made.
- 1874 (Vasey) (In A1.1:874, p. 156.)

## Tables

Classifica-  
tion no.

## A6. BOTANY DIVISION—Continued

### A6.1: Annual reports—Continued

- 1875 No report made.  
 1876 (Vasey) (In A1.1:876, p. 73.)  
 1877 No report made.  
 1878 [No regular annual report appears, but a "Report of the Botanist and Chemist on grasses and forage plants, by George Vasey and Peter Collier," appears in the Secretary's report for 1878, pp. 157-194. See A1.1:878].  
 1879 (Vasey). (In A1.1:879, p. 349.)  
 1880 (Vasey). (In A1.1:880, p. 375.)  
 1881 and 1882 (Vasey). (In A1.1:881-2, p. 231.)  
 1883 (Vasey). (In A1.1:883, p. 83.)  
 1884 (Vasey). (In A1.1:884, p. 123.)  
 1885 (Vasey). (In A1.1:885, p. 63.)  
 886 1886 (Vasey), [1]+69-93 pp. 21 pls. (Also in A1.1:886, p. 69.)  
 1887 (Vasey). (In A1.1:887, p. 301.)  
 888 1888 (Vasey), [1]+305-324 pp. 13 pls. (Also in A1.1:888, p. 305.)  
 889 1889 (Vasey), [1]+377-396 pp. 11 pls. (Also in A1.1:889, p. 377.)  
 890 1890 (Vasey), [1]+375-392 pp. 8 pls. (Also in A1.1:890, p. 375.)  
 891 1891 (Vasey), [1]+341-358 pp. 10 pls. (Also in A1.1:891, p. 341.)  
 892 1892 (Vasey), [1]+201-214. 9 pls. (Also in A1.1:892, p. 201.)  
 893 1893 (Coville), iii+235-244 pp. (Also in A1.1:893, p. 235.)  
 894 1894 (Coville), iii+161-166 pp. (Also in A1.1:894, p. 161.)  
 895 1895 (Coville), iii+159-164 pp. (Also in A1.1:895, p. 159.)  
 896 1896 (Coville), iii+95-102 pp. (Also in A1.1:896, p. 95.)  
 897 1897 (Coville), ii+167-172 pp. (Also in A1.1:897, p. 167.)  
 898 1898 (Coville), iii+153-158 pp. (Also in A1.1:898, p. 153.)  
 899 1899 (Coville), iii+53-57 pp. (Also in A1.1:899, p. 53.)  
 900 1900 (Coville), iii+91-101 pp. (Also in A1.1:900, p. 91.)  
 1901 (Coville). [This final report of the Division was made through the chief of the Bureau of Plant Industry, forming part of his annual report for 1901. (See A1.1:901, p. 62; also A19.1:901, p. 67.)]

### A6.1a: Annual reports (separates)

[A few of the more important papers contained in the annual reports have been issued separately. References to all the papers will be found under their proper headings in the index to this work.]

### A6.2: General publications

[Publications which originated in this Division but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the Index to this work. Publications of the Division issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

- B65 Botanical Exchange Club. Rules for Botanical Exchange Club; by George Vasey. n. d. (Circ.)  
 G76 Grasses of U. S. Descriptive catalogue of grasses of U. S., including especially grass collections at New Orleans Exposition made by U. S. Department of Agriculture and State exhibits of grasses, with notes on such species as are more or less employed in agriculture or deserving of trial and cultivation; by Geo. Vasey. 1885. Washington, Gibson Bros. 1885. 110 pp.  
 [Published as report of Agriculture Department at World's Industrial and Cotton Centennial. "Said to have been printed at Gibson Bros. to save expense. Paid for from Exposition funds."—(Written note on t. p. of copy in file of Agriculture Department, Publications Division.)]  
 In7 Instructions to botanical collectors; by Geo. Vasey. n. d. (Circ.)  
 N82<sup>1</sup> North American grasses. Illustrations of North American grasses, vol. 1. Grasses of the Southwest; plates and descriptions of grasses of desert region of western Texas, New Mexico, Arizona, and southern California; by Geo. Vasey. 1891. vii+[2]+7+[2] pp. 49 l. 50 pl. and 7+[2] pp. 49 l. 50 pl. Large 8°. (Reissue of Botany Bulletin no. 12. pts. 1, 2.)

Classifica-  
tion no.**A6. BOTANY DIVISION—Continued****A6.2: General publications—Continued**

- N82<sup>2</sup> North American grasses. Grasses of the Pacific slope, including Alaska and adjacent islands; plates and descriptions of grasses of California, Oregon, Washington, and the northwestern coast, including Alaska; by Geo. Vasey. 1893. viii+[4] pp. 98 l. 100 pl. large 8°.

[Reissue of Botany Bulletin no. 13, pts. 1, 2.]

- P69 Plant breeding and seed selection; by Frederick V. Coville. June 22, 1898. n. t. p. 2 pp.

**A6.3: Bulletins**

- ✓ 1 No. 1. Investigation of grasses of arid districts of Kansas, Nebraska, and Colorado; by George Vasey. 1886. 19 pp. 13 pl.
- 2 No. 2. Fungus diseases of grape vine; by Frank Lamson-Scribner. 1886. 136 pp. 7 pl.
- 3 No. 3. Grasses of the South, report on certain grasses and forage plants for cultivation in South and Southwest; by George Vasey. 1887. 63 pp. 16 pl.
- 4 No. 4. Desiderata of herbarium for North America north of Mexico. Ranunculaceæ to Rosaceæ, inclusive; by Geo. Vasey. (Distributed among botanists with the purpose of obtaining specimens.) 1887. 15 pp.
- ✓ 5 No. 5. Experiments made in 1887 in treatment of downy mildew and black-rot of grapevine with chapter on apparatus for applying remedies for these diseases; by F. Lamson-Scribner. 1888. 113 pp. 1 table.
- 6 [No. 6. Grasses of arid districts.] Investigation of grasses of arid districts of Texas, New Mexico, Arizona, Nevada, and Utah, in 1887. 1888. 61 pp. 30 pl.
- [The Department and Division designation and the bulletin number and series titles as bracketed above appear only on the cover.]
- 7 No. 7. Black rot [of grape vine]; by F. Lamson-Scribner and Pierre Viala. 1888. 29 pp. 1 pl.
- 8 No. 8. Record of some work of division, including extracts from correspondence and other communications; [articles] prepared by George Vasey and B. T. Galloway. 1889. 67 pp.
- 9 No. 9. Peach yellows, a preliminary report; by Erwin F. Smith. 1888. 254 pp. 46 pl.
- 10 No. 10. Experiments made in 1888 in treatment of downy mildew and black rot of grape vine. 1889. 61 pp. 2 pl.
- 11 No. 11. Experiments made in 1889 in treatment of fungous diseases of plants; prepared by B. T. Galloway. 1890. 119 pp. 7 pl.
- [Plates numbered to eight, but plate 1 is page 26.]
- ✓ 12<sup>1</sup> No. 12. Grasses of the Southwest; plates and descriptions of grasses of desert region of western Texas, New Mexico, Arizona, and southern California; by Geo. Vasey. Pt. 1, 1890. 7+[2] pp. 49 l. 50 pl. large 8°.
- ✓ 12<sup>2</sup> Same, pt. 2. 1891. 7+[4] pp. 49 l. 50 pl. large 8°. (Title-page and table of contents for vol. 1, Illustrations of North American Grasses, appended to this part.)
- [Bulletin no. 12, pts. 1, 2, also issued as vol. 1, Illustrations of North American Grasses. See A6.2:N82<sup>1</sup>.]
- 13<sup>1</sup> No. 13. Grasses of Pacific Slope, including Alaska and adjacent islands; plates and descriptions of grasses of California, Oregon, Washington, and the northwestern coast, including Alaska; by Geo. Vasey. Pt. 1. 1892. 7+[2] pp. 49 l. 50 pl. large 8°.
- 13<sup>2</sup> Same, pt. 2. 1893. 7+[2] pp. 49 l. 50 pl. large 8°. (Title-page and table of contents for vol. 2, Illustrations of North American Grasses, appended to this part.)
- [Bulletin no. 13, pts. 1, 2, also issued as vol. 2, Illustrations of North American Grasses. See A6.2:N82<sup>2</sup>.]
- ✓ 14 No. 14. Ilex cassine, aboriginal North American tea, its history, distribution, and use among native North American Indians; by E. M. Hale. 1891. 22 pp. 1 pl.



# Tables

Classification  
no.

## A6. BOTANY DIVISION—Continued

### A6.3: Bulletins—Continued

- 15 No. 15. Russian thistle, its history as a weed in U. S., with an account of means available for its eradication; by Lyster Hoxie Dewey. 1894. 32 pp. 3 pl. 2 maps.
- 16<sup>1</sup> No. 16. American ginseng, its commercial history, protection, and cultivation; by George V. Nash. 1895. 22 pp.
- 16<sup>2</sup> Same, revised and extended by Maurice G. Kains. 1898. 32 pp.
- 16<sup>3</sup> Same, [with prefatory note by Frederick V. Coville]. 1902. 32 pp.
- 17 No. 17. Legislation against weeds; by Lyster H. Dewey. 1896. 60 pp.
- 18 No. 18. Water hyacinth, and its relation to navigation in Florida; by Herbert J. Webber. 1897. 20 pp. 1 pl.
- 19 No. 19. Chicory growing as addition to resources of American farmer; by Maurice G. Kains. 1898. 52 pp.
- 20 No. 20. Principal poisonous plants of United States; by V. K. Chesnut. 1898. 60 pp.
- 21 No. 21. Vanilla culture, as practiced in Seychelles Islands; by S. J. Galbraith. 1898. 24 pp. 1 pl.
- 22 No. 22. Present status of rice culture in United States; by S. A. Knapp. 1899. 56 pp. 3 pl.
- 23 No. 23. Russian cereals adapted for cultivation in United States; by Mark Alfred Carleton. 1900. 42 pp. 2 pl.
- 24 No. 24. Germination of seeds as affected by certain chemical fertilizers; by Gilbert H. Hicks. 1900. 15 pp. 2 pl.
- 25 No. 25. Shade in coffee culture; by O. F. Cook. 1901. 79 pp. 16 pl.
- 26 No. 26. Stock-poisoning plants of Montana, preliminary report; by V. K. Chesnut and E. V. Wilcox. 1901. 150 pp. 37 pl.  
Same, 56th Cong., 2d sess., S. doc. 160; serial no. 4039.
- 27 No. 27. Seeds of commercial saltbushes; by G. N. Collins. 1901. 28 pp. 8 pl.
- 28 No. 28. Chayote, a tropical vegetable; by O. F. Cook. 1901. 31 pp. 8 pl.
- 29 No. 29. Seed coats of certain species of genus Brassica; by A. J. Pieters and Vera K. Charles. 1901. 19 pp. 1 pl. *Not published*

### A6.4: Circulars

- 1 No. 1. Hungarian brome grass; by F. Lamson-Scribner. May 23, 1894. n. t. p. 4 pp.
- 2 No. 2. Nut grass; by L. H. Dewey. Oct. 16, 1894. n. t. p. 4 pp.
- 3<sup>1</sup> No. 3. Russian thistle; by L. H. Dewey. [Jan. 4, 1895.] n. t. p. 8 pp.
- 3<sup>2</sup> Same, rev. ed. Nov. 20, 1895. n. t. p. 8 pp.
- 4 No. 4. Flat pea; by F. Lamson-Scribner. Feb. 27, 1895. n. t. p. 7 pp.
- 5 No. 5. Giant knotweed, or sachaline; by F. Lamson-Scribner. Feb. 26, 1895. n. t. p. 4 pp.
- 6 No. 6. Standards of the purity and vitality of agricultural seeds; by Gilbert H. Hicks. May 9, 1896. n. t. p. 4 pp.
- 7<sup>1</sup> No. 7. Tumbling mustard, by Lyster H. Dewey. June 5, 1896. n. t. p. 8 pp.
- 7<sup>2</sup> Same, 2d ed. June 5, 1896. n. t. p. 8 pp.
- 8 No. 8. Crimson clover hair balls; by Frederick V. Coville. June 15, 1896. n. t. p. 4 pp.
- 9<sup>1</sup> No. 9. Wild garlic; by Lyster H. Dewey. Feb. 15, 1897. n. t. p. 8 pp.
- 9<sup>2</sup> Same, revised. June 2, 1900. n. t. p. 8 pp.
- 10 No. 10. Three new weeds of mustard family; by Lyster H. Dewey. Apr. 30, 1897. n. t. p. 6 pp.
- 11 No. 11. Vitality of seed treated with carbon bisulphid; by Gilbert H. Hicks and John C. Dabney. n. d. n. t. p. 5 pp.
- 12<sup>1</sup> No. 12. Camphor tree; by Lyster H. Dewey. Aug. 12, 1897. n. t. p. 7 pp.
- 12<sup>2</sup> Same, revised. Sept. 21, 1897. n. t. p. 8 pp.
- 13<sup>1</sup> No. 13. Observations on recent cases of mushroom poisoning in District of Columbia; by Frederick V. Coville. Dec. 1, 1897. n. t. p. 21 pp.
- 13<sup>2</sup> Same, rev. ed. Jan. 4, 1898. n. t. p. 24 pp.
- 13<sup>3</sup> Same, 3d ed. May 15, 1899. n. t. p. 24 pp.

Classifica-  
tion no.**A6. BOTANY DIVISION—Continued****A6.4: Circulars—Continued**

- 14 No. 14. Dodders infesting clover and alfalfa; by Lyster H. Dewey. Apr. 25, 1898. n. t. p. 7 pp.
- 15 No. 15. Horse-radish; by M. G. Kains. May 20, 1898. n. t. p. 8 pp.
- 16 No. 16. Section of seed and plant introduction; by O. F. Cook. Jan. 25, 1899. n. t. p. 6 pp.
- 17 No. 17. Notes on plant products of Philippine Islands; by Frank H. Hitchcock. May 15, 1899. n. t. p. 8 pp.
- 18<sup>1</sup> No. 18. Crimson clover seed; by A. J. Pieters. Aug. 5, 1899. n. t. p. 4 pp.
- 18<sup>2</sup> Same, revised. July 20, 1900. n. t. p. 7 pp.
- 19 No. 19. Hop cultivation in Bohemia; by David G. Fairchild. Oct. 10, 1899. n. t. p. 6 pp.
- 20 No. 20. Horse-radish culture in Bohemia; by David G. Fairchild. Dec. 15, 1899. n. t. p. 3 pp.
- 21 No. 21. Yams in West Indies; by David G. Fairchild. Dec. 6, 1899. n. t. p. 4 pp.
- 22 No. 22. Bur, or globe, artichokes; by Walter T. Swingle and David G. Fairchild. Dec. 11, 1899. n. t. p. 6 pp.
- 23 No. 23. Lebbek or siris tree; by David G. Fairchild. Feb. 3, 1900. n. t. p. 4 pp.
- 24 No. 24. Red clover seed; by Adrian J. Pieters. Mar. 6, 1900. n. t. p. 5 pp.
- 25 No. 25. Seed of beardless brome grass; by A. J. Pieters. Mar. 10, 1900. n. t. p. 5 pp.
- 26 No. 26. Egyptian cotton in U. S.; by Lyster H. Dewey. Mar. 16, 1900. n. t. p. 9 pp.
- 27<sup>1</sup> No. 27. Canada thistle; by Lyster H. Dewey. May 15, 1900. n. t. p. 14 pp.
- 27<sup>2</sup> Same, revised. 1901. n. t. p. 14 pp.
- 28 No. 28. Rubber cultivation for Porto Rico; by O. F. Cook. June 22, 1900. n. t. p. 12 pp.
- 29 No. 29. Chicory growing; by Maurice G. Kains. Oct. 30, 1900. n. t. p. 12 pp.
- 30<sup>1</sup> No. 30. List of publications of Division of Botany; by Frederick V. Coville. May 17, 1901. n. t. p. 10 pp.
- 30<sup>2</sup> Same, revised edition, Dec. 29, 1902. n. t. p. 12 pp.

**A6.5: Contributions from U. S. national herbarium**

[The U. S. National Herbarium, founded by the Smithsonian Institution, was transferred to the Agriculture Department in 1868, and returned to the custody of the Smithsonian Institution, July 1, 1896. The Agriculture Department, however, continued to publish this series of botanical reports until July 1, 1902, when, in pursuance of an act of Congress, the National Museum assumed the responsibility of the publication.]

- 1 V. 1. Reports on collections and miscellaneous papers. 1890-1895.  
Contents:
- No. 1. List of plants collected by Edward Palmer in 1888 in South Carolina, by George Vasey and J. N. Rose; List of plants collected by Edward Palmer at Lagoon Head, Cedros Island, San Benito Island, Guadalupe Island, Head of Gulf of California, by George Vasey and J. N. Rose. 1890. vii+28 pp.
- No. 2. Collection of plants made by G. C. Nealley in region of Rio Grande in Texas, from Brazos Santiago to El Paso County; by John M. Coulter. 1890. iii+29-65 pp.
- No. 3. List of plants collected by Edward Palmer in 1890 in Lower California and western Mexico, at La Paz, San Pedro, Martin Island, Raza Island, Santa Rosalia, and Santa Agueda, Guaymas; by George Vasey and J. N. Rose. 1890. vi+63-90 pp. 1 pl.
- No. 4. List of plants collected by Edward Palmer in 1890 in western Mexico and Arizona, at Alamos and [in] Arizona; by J. N. Rose. 1891. vii+91-127 pp. 10 pl.
- No. 5. List of plants collected by Edward Palmer in 1890 on Carmen Island, by J. N. Rose; List of plants collected by U. S. S. Albatross in 1887-91 along western coast of America, [articles] by J. N. Rose, D. C. Eaton, J. W. Eckfeldt, and A. W. Evans; Revision of North American species of Hoffmanseggia, by E. M. Fisher; Systematic and alphabetic index of new species of North American phanerogams and pteridophytes, published in 1891, by Josephine A. Clark. 1892. x+129-188 pp. 5 pl.
- No. 6. List of plants collected by C. S. Sheldon and M. A. Carleton in Indian Territory in 1891, by J. M. Holzinger; Observations on native plants of Oklahoma Territory and adjacent districts, by M. A. Carleton. 1892. ix+189-232 pp. 2 pl.
- No. 7. Systematic and alphabetic index to new species of North American phanerogams and pteridophytes published in 1892; by Josephine A. Clark. 1893. iii+283-264+iii pp.



# Tables

Classification  
no.

## A6. BOTANY DIVISION—Continued

### A6.5: Contributions from U. S. national herbarium—Continued

- 1 V. 1. Reports on collections and miscellaneous papers—Continued  
Contents—Continued  
No. 8. Notes on some Pacific coast grasses, by George Vasey; Descriptions of new or noteworthy grasses from U. S., by George Vasey; Descriptions of new grasses from Mexico, by George Vasey; Descriptions of new plants from Texas and Colorado, by J. M. Holzinger; List of plants new to Florida, by J. M. Holzinger; Descriptions of three new plants, by J. N. Rose; List of lichens from California and Mexico, collected by Edward Palmer from 1888 to 1892, by J. W. Eckfeldt. 1893. iii+265-292+ii pp. 5 pl.  
No. 9. Report on collection of plants made in States of Sonora and Colima, Mexico by Edward Palmer, in 1890 and 1891; by J. N. Rose. 1895. v+293-434 pp. 13 pl. [Title page and tables of contents and illustrations for volume 1, appended to this number. viii pp.]
- 2 V. 2. Botany of western Texas, a manual of phanerogams and pteridophytes of western Texas; by John M. Coulter. 1891-94.  
Contents:  
No. 1. Manual of phanerogams and pteridophytes of western Texas; Polypetalæ, by John M. Coulter. 1891. v+152+iv pp. 1 pl.  
No. 2. Same, Gamopetalæ; by John M. Coulter. 1892. x+153-345 pp. 2 pl.  
No. 3. Same, Apetalæ, Monocotyledonæ, Pteridophyta, by John M. Coulter. 1894. v+347-588 pp. (1 sheet following p. 430.) [Title page and table of contents for volume, issued with this part. v pp.]  
[Volume 2 was reprinted by the Smithsonian Institution, 1902, under title "Botany of western Texas."]
- 3 V. 3. Reports on collections, revisions of groups, and miscellaneous papers. 1892-1896.  
Contents:  
No. 1. Monograph of grasses of U. S. and British America; by George Vasey. 1892. xiv+89 pp.  
No. 2. Preliminary revision of North American species of cactus, anhalonium, and lophophora; by John M. Coulter. 1894. iii+91-132+ii pp.  
No. 3. Flora of sand hills of Nebraska; by P. A. Rydberg. 1895. v+133-203 pp. 2 pl.  
No. 4. Report on collection of plants made by J. H. Sandberg and assistants in northern Idaho in 1892; by John M. Holzinger. 1895. v+205-287+v pp. 2 pl.  
No. 5. Report on Mexican umbelliferæ, mostly from State of Oaxaca, recently collected by C. G. Pringle and E. W. Nelson, by John M. Coulter and J. N. Rose; Descriptions on plants, mostly new, from Mexico and U. S., by J. N. Rose. 1895. v+289-323+ii pp. 12 pl.  
No. 6. Botany of Yakutat Bay, Alaska, by Frederick Vernon Coville; with field report, by Frederick Funston. 1895. iii+325-353+ii pp.  
No. 7. Preliminary revision of North American species of echinocactus, cereus, and opuntia; by John M. Coulter. 1896. iii+355-462+iv pp.  
No. 8. Flora of Black Hills of South Dakota; by P. A. Rydberg. 1896. v+463-536+iv pp. 4 pl.  
No. 9. Flora of southwestern Kansas, report on collection of plants made by C. H. Thompson in 1893, by A. S. Hitchcock; Crepis occidentalis, and its allies, by Frederick V. Coville; Plants from Big Horn Mountains of Wyoming, by J. N. Rose; Leibergia, a new genus of umbelliferæ from Columbia River region, by John M. Coulter and J. N. Rose; Roseanthus, a new genus of cucurbitaceæ from Acapulco, Mexico, by Alfred Cogniaux. 1896. v+537-612 pp. 8 pl. [Title page and table of contents for volume issued with this part. vii pp.]
- 4 V. 4. Botany of Death Valley expedition; Report on botany of expedition sent out in 1891 by U. S. Department of Agriculture to make biological survey of region of Death Valley, California, by Frederick Vernon Coville. 1893. viii+363 pp. 22 pl. 1 map.
- 5 V. 5. Systematic, economic, and ecological investigations. 1897-1901.  
Contents:  
No. 1. General report on botanical survey of Cœur d'Alene Mountains in Idaho during summer of 1895; by John B. Leiberger. 1897. v+85 pp. 1 pl.  
No. 2. Plants used by Klamath Indians of Oregon; by Frederick V. Coville. 1897. v+87-108+ii pp.  
No. 3. Studies of Mexican and Central American plants; by J. N. Rose. 1897. vii+109-144+1 pp. 16 pl.  
No. 4. Studies of Mexican and Central American plants—No. 2; by J. N. Rose; Two new species of plants from northwestern U. S., by L. F. Henderson; Hesperigenia, a new genus of umbelliferæ from Mount Rainier, by J. M. Coulter and J. N. Rose; Three new species of tradescantia from U. S., by J. N. Rose; Treleasea, a new genus of commelinaceæ, by J. N. Rose; Notes on useful plants of Mexico, by J. N. Rose. 1899. viii+145-259+viil pp. 47 pl.  
No. 5. Plant covering of Ocracoke Island, a study in the ecology of the North Carolina strand of vegetation; by Thomas H. Kearney, jr. 1900. iv+261-319 pp.  
No. 6. Report on botanical survey of Dismal Swamp region; by Thomas H. Kearney. 1901. x+321-585+x pp. 12 pl. 2 maps. [Title page and table of contents for volume, issued with this part. x pp.]

Classifica-  
tion no.**A6. BOTANY DIVISION—Continued****A6.5: Contributions from U. S. national herbarium—Continued**

- 6 V. 6. Plant life of Alabama; distribution, modes of association, and adaptations of flora of Alabama, with systematic catalogue of plants growing in State; prepared in cooperation with Geological Survey of Alabama; by Charles Mohr. 1901. 921 pp. 13 pl.

- 7 V. 7. Systematic and geographic botany, and aboriginal uses of plants. 1900-1902.

Contents:

No. 1. Monograph of North American umbelliferae; by John M. Coulter and J. N. Rose. 1900. 256+vii pp. 9 pl.

No. 2. Origin and distribution of Cocoa palm; by O. F. Cook. 1901. v+257-298 pp.

No. 3. Plants used by Indians of Mendocino County, California; by V. K. Chesnut. 1902. vi+295-408+vii pp. pl. 10-21. [Title page and contents for volume, 1900-1902. pp. 1-8, 409-422.]

**A6.5<sup>a</sup>: Contributions from U. S. national herbarium (separates)**

[A few of the more important papers contained in the various numbers of this series are issued separately in pamphlet form. References to all the papers contained in this series will be found under the proper headings in the index to this work.]

**A6.6: Inventories**

- 1 No. 1. Foreign seeds and plants imported by section of seed and plant introduction, numbers 1-1000. n. d. 81 pp.
- 2 No. 2. Foreign seeds and plants imported by section of seed and plant introduction, numbers 1001-1900. [July 5, 1899.] 94 pp.
- 3 No. 3. Seeds of saccharine sorghums distributed by section of seed and plant introduction. [Ap. 10, 1899.] 14 pp.
- ✓ 4 No. 4. Cereals and forage plants collected in Russia by M. A. Carleton for section of seed and plant introduction. [Ap. 15, 1899.] 9 pp.
- 5 No. 5. Foreign seeds and plants imported by Department of Agriculture and for distribution through the section of seed and plant introduction. Numbers 1901-2700. Nov. 3, 1899. 62 pp.
- ✓ 6 No. 6. Foreign seeds and plants collected in Austria, Italy, and Egypt by Barbour Lathrop and David G. Fairchild for section of seed and plant introduction. [Jan. 30, 1900.] 15 pp.
- 7 No. 7. Foreign seeds and plants imported by Department of Agriculture; numbers 2701-3400. Aug. 18, 1900. 86 pp.
- 8 No. 8. Seeds and plants imported for distribution in coöperation with agricultural experiment stations; numbers 3401-4350. Jan. 1, 1901. 106 pp.

**A7. CHEMISTRY BUREAU**

[Formerly Chemistry Division; changed to Bureau July 1, 1901. For historical sketch of Division, see Yearbook 1897 (A1.10:897), p. 76.]

**A7.1: Annual reports**

- 1862 (Wetherill). (In A1.1:862, p. 508.)
- 1863 no report printed.
- 1864 (Erni). (In A1.1:864, p. 514.)
- 1865 (Erni). (In A1.1:865, p. 46.)
- 1866 (Antisell). (In A1.1:866, p. 45.)
- 1867 (Antisell). (In A1.1:867, p. 31.)
- 1868 (Antisell). (In A1.1:868, p. 59.)
- 1869 (Antisell). (In A1.1:869, p. 65.)
- 1870 (Antisell). (In A1.1:870, p. 91.)
- 1871 (Brown). (In A1.1:871, p. 89.)
- 1872 (Brown). (In A1.1:872, p. 138.)
- 1873 (McMurtrie). (In A1.1:873, p. 170.)
- 1874 (McMurtrie). (In A1.1:874, p. 147.)
- 1875 (McMurtrie). (In A1.1:875, p. 141.)
- 1876 (McMurtrie). (In A1.1:876, p. 46.)
- 1877 (McMurtrie). (In A1.1:877, p. 65.)
- 1878 (Collier). (In A1.1:878, p. 95.)
- 1879 (Collier). (In A1.1:879, p. 35.)

## Tables

Classification  
no.

## A7. CHEMISTRY BUREAU—Continued

### A7.1: Annual reports—Continued

- 1880 (Collier). (In A1.1:880, p. 37.)  
 1881 and 1882 (Collier). (In A1.1:881-2, p. 379.)  
 1883 (Richardson). (In A1.1:883, p. 197.)  
 1884 (Wiley). (In A1.1:884, p. 19.)  
 1885 (Wiley). (In A1.1:885, p. 109.)  
 1886 (Wiley). (In A1.1:886, p. 277.)  
 1887 (Wiley). (In A1.1:887, p. 181.)  
 1888 (Wiley). (In A1.1:888, p. 221.)  
 889 1889 (Wiley), [1]+135-190 pp. (Also in A1.1:889, p. 135.)  
 890 1890 (Wiley), iii+133-192 pp. (Also in A1.1:890, p. 133.)  
 891 1891 (Wiley), [3]+143-190 pp. (Also in A1.1:891, p. 143.)  
 892 1892 (Wiley), iii+123-152 pp. (Also in A1.1:892, p. 123.)  
 893 1893 (Wiley), iv+169-198 pp. (Also in A1.1:893, p. 169.)  
 1894 (Wiley). (In A1.1:894, p. 151.)  
 1895 (Wiley). (In A1.1:895, p. 145.)  
 896 1896 (Wiley), iii+9-14 pp. (Also in A1.1:896, p. 9.)  
 897 1897 (Wiley), ii+5 pp. (Also in A1.1:897, p. 1.)  
 898 1898 (Wiley), iii+7-15 pp. (Also in A1.1:898, p. 7.)  
 899 1899 (Wiley), iii+25-42 pp. (Also in A1.1:899, p. 25.)  
 900 1900 (Wiley), ii+17-28 pp. (Also in A1.1:900, p. 17.)  
 901 1901 (Wiley), ii+95-111 pp. (Also in A1.1:901, p. 95.)  
 902 1902 (Wiley), ii+137-154 pp. (Also in A1.1:902, p. 137.)

### A7.2: General publications

[Publications which originated in this Bureau, but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of this Bureau, issued only as Congressional documents, are noted in chronological order in the Appendix to this work.]

- Beet sugar industry. See A1.2: B39.  
 Oi5 Oils and fats. Methods for analysis of edible oils and fats, not including dairy products; by L. M. Tolman. [1901.] n. t. p. 15 pp.  
 P96<sup>1</sup> Publications of Division of Chemistry. Dec. 20, 1899. n. t. p. 4 pp.  
 P96<sup>2</sup> Same. May 1, 1901. n. t. p. 4 pp.  
 P96<sup>3</sup> Same. Aug. 1, 1902. n. t. p. 6 pp.

### A7.3: Bulletins

- ✓ 1 No. 1. Investigation of composition of American wheat and corn; [by] Clifford Richardson. 1883. 69 pp. 1 folded table.  
 [For errata to this Bulletin, see A7.3:4, p. 98.]  
 2 No. 2. Diffusion, its application to sugar cane and record of experiments with sorghum in 1883; [by] H. W. Wiley. 1884. 36 pp. 2 pl.  
 3 No. 3. Northern sugar industry; a record of its progress during season of 1883; [by] H. W. Wiley. 1884. 118+2 pp. 4 pl. 11 charts.  
 4 No. 4. Investigation of composition of American wheat and corn, 2d report; [by] Clifford Richardson. 1884. 98 pp.  
 [Errata to Bulletin No. 1 on page 98.]  
 5 No. 5. Sugar industry of United States, cane sugar, beet sugar, sorghum sugar, maple sugar; by Harvey W. Wiley. 1885. 224 pp. 16 pl. 1 map.  
 6 No. 6. Experiments with diffusion and carbonatation at Ottawa, Kansas, campaign of 1885; by Harvey W. Wiley. 1885. 20 pp.  
 7 No. 7. Methods of analysis of commercial fertilizers; proceedings [2d annual convention] Association of Official Agricultural Chemists, Sept. 1, 2, 1885 [edited by Chas. W. Dabney, jr.]. 1885. 49 pp.  
 8 No. 8. Methods and machinery for application of diffusion to extraction of sugar from sugar cane and sorghum, and for use of lime and carbonic and sulphurous acids in purifying the diffusion juices; [by] Harvey W. Wiley. 1886. 85 pp. 22 pl.  
 9 No. 9. Third report on chemical composition and physical properties of American cereals, wheat, oats, barley, and rye; by Clifford Richardson. 1886. 82 pp.

Classification  
no.**A7. CHEMISTRY BUREAU—Continued****A7.3: Bulletins—Continued**

- ✓ 10 No. 10. Principles and methods of soil analysis; [by] Edgar Richards. 1886. 66 pp.
- 11 No. 11. Experiments in manufacture of sugar at Magnolia Station, Lawrence, La., season of 1885-6. 2d report; by Guilford L. Spencer. 1886. 26 pp. 1 pl.
- ✓ 12 No. 12. Methods of analysis of commercial fertilizers; proceedings 3d annual convention of Association of Official Agricultural Chemists, Aug. 26, 27, 1886. 1886. 59 pp.
- 13<sup>1</sup> No. 13. Foods and food adulterants; pt. 1. Dairy products. 1887. 128+iv pp. 12 pl.
- ✓ 13<sup>2</sup> Same, pt. 2. Spices and condiments; by Clifford Richardson. 1887. [1]+129-259 pp. 16 pl.
- ✓ 13<sup>3</sup> Same, pt. 3. Fermented alcoholic beverages, malt liquors, wine, and cider; by C. A. Crampton. 1887. [1]+261-399 pp.
- 13<sup>4</sup> Same, pt. 4. Lard and lard adulterations; by H. W. Wiley. 1889. [1]+403-554 pp. 10 pl.
- 13<sup>5</sup> Same, pt. 5. Baking powders; by C. A. Crampton. 1889. [1]+557-627 pp.
- 13<sup>6</sup> Same, pt. 6. Sugar, molasses and sirup, confections, honey, and beeswax, made under direction of H. W. Wiley, with collaboration of H. A. Huston, H. H. Nicholson, W. B. Rising, M. A. Scovell, S. P. Sharples, W. C. Stubbs, Shippen Wallace, F. G. Weichmann, H. A. Weber, and K. P. McElroy. 1892. [1]+631-874+ix pp.
- 13<sup>7</sup> Same, pt. 7. Tea, coffee, and cocoa preparations; by Guilford L. Spencer with collaboration of Ervine E. Ewell. 1892. vii+875-1014+vi pp. 9 pl.
- 13<sup>8</sup> Same, pt. 8. Canned vegetables; by K. P. McElroy with collaboration of W. D. Bigelow. 1893. vi+1015-1167+xii pp.
- 13<sup>9</sup> Same, pt. 9. Cereals and cereal products made under direction of H. W. Wiley, with collaboration of K. P. McElroy, W. H. Krug, T. C. Trescot, W. D. Bigelow, and others. 1898. vii+1169-1374 pp. 7 pl.
- 13<sup>10</sup> Same, pt. 10. Preserved meats; by W. D. Bigelow, with collaboration of Edward Mackay Chance, L. S. Munson, L. M. Tolman, and others. 1902. ix+1375-1517 pp.
- 14 No. 14. Experiments at Fort Scott, Kansas, in manufacture of sugar from sorghum and sugar canes in 1886; by H. W. Wiley. 1887. 64 pp.
- 15 No. 15. Experiments in manufacture of sugar at Magnolia Station, Lawrence, Louisiana, season of 1886-87; 3d rp., by Guilford L. Spencer. 1887. 35 pp.
- ✓ 16 No. 16. Methods of analysis of commercial fertilizers, feeding stuffs, and dairy products, adopted at 4th annual convention of Association of Official Agricultural Chemists, Aug. 16-18, 1887; edited by Clifford Richardson. 1887. 80 pp. 4 pl.
- 17 No. 17. Experiments in manufacture of sugar from sorghum and sugar canes at Fort Scott, Kansas, Rio Grande, N. J., and Lawrence, La. 1888. 118 pp. 6 pl.
- 18 No. 18. Sugar-producing plants; analyses made under direction of chemist; sorghum [at] Fort Scott, Kans., Rio Grande, N. J.; sugar cane [at Magnolia Station] Lawrence, La.; with study of data collected on sorghum and sugar cane. 1888. 132 pp.
- ✓ 19 No. 19. Methods of analysis of commercial fertilizers, cattle foods, dairy products, sugar, and fermented liquors, adopted at fifth annual convention Association of Official Agricultural Chemists, held Aug. 9, 10, 1888; edited by Clifford Richardson. 1888. 96 pp.
- 20 No. 20. Record of experiments in manufacture of sugar from sorghum at Rio Grande, N. J.; Kenner, La.; Conway Springs, Douglass, and Sterling, Ks., 1888; by H. W. Wiley. 1889. 162 pp.
- 21 No. 21. Experiments in manufacture of sugar by diffusion at Magnolia Station, Lawrence, La., season of 1888-89; by Guilford L. Spencer. 1889. 67 pp.
- ✓ 22 No. 22. Record of experiments at Des Lignes sugar experiment station, Baldwin, La., season of 1888; by C. A. Crampton. 1889. 36 pp.

## Tables

Classification  
no.

## A7. CHEMISTRY BUREAU—Continued

### A7.3: Bulletins—Continued

- ✓ 23 No. 23. Experiments at sugar experiment station on Calumet Plantation, Pattersonville, La., [1888]; by Hubert Edson. 1889. 42 pp.
- ✓ 24 No. 24. Proceedings 6th annual convention Association of Official Agricultural Chemists, Sept. 10-12, 1889, methods of analysis of commercial fertilizers, cattle foods, dairy products, and fermented liquors; edited by Harvey W. Wiley. 1890. 235 pp.
- 25 No. 25. Popular treatise on extent and character of food adulterations; by Alex. J. Wedderburn. 1890. 61 pp.
- 26 No. 26. Record of experiments in production of sugar from sorghum in 1889, at Cedar Falls, Iowa; Rio Grande, N. J.; Morrisville, Va.; Kenner, La.; College Station, Md.; and Conway Springs, Attica, Medicine Lodge, Ness City, Liberal, Arkalon, Meade, Minneola, and Sterling, Kans.; by H. W. Wiley. 1890. 112 pp. 1 folded table.
- 27 No. 27. Sugar-beet industry; culture of sugar beet and manufacture of beet sugar; by H. W. Wiley. 1890. 262 pp. 12 pl.
- 28 No. 28. Proceedings of 7th annual convention of Association of Official Agricultural Chemists, Aug. 28-30, 1890; methods of analysis of commercial fertilizers, foods, and feeding stuffs, dairy products, fermented liquors, and sugars; edited by Harvey W. Wiley. 1890. 238 pp.
- 29 No. 29. Record of experiments with sorghum in 1890; by Harvey W. Wiley. 1891. 125 pp. 1 folded table.
- 30 No. 30. Experiments with sugar beets in 1890; by Harvey W. Wiley. 1891. 93 pp.
- 31 No. 31. Proceedings of 8th annual convention of Association of Official Agricultural Chemists, Aug. 13-15, 1891; methods of analysis of commercial fertilizers, foods and feeding stuffs, dairy products, fermented liquors, and sugars; edited by Harvey W. Wiley. 1891. 253 pp.
- 32 No. 32. Special report on extent and character of food adulterations, including State and other laws relating to foods and beverages; by Alex. J. Wedderburn. 1892. 174 pp.
- 33 No. 33. Experiments with sugar beets in 1891; by Harvey W. Wiley, with collaboration of Walter Maxwell, W. A. Henry, and others. 1892. 158 pp.
- 34 No. 34. Record of experiments with sorghum in 1891; by Harvey W. Wiley, with collaboration of G. L. Spencer, A. A. Denton, and Wibray J. Thompson. 1892. 132 pp.
- 35 No. 35. Proceedings of 9th annual convention of Association of Official Agricultural Chemists, Aug. 25-27, 1892; edited by Harvey W. Wiley. 1892. vi+243+vii-xvii.
- ✓ 36 No. 36. Experiments with sugar beets in 1892; by Harvey W. Wiley, with collaboration of Walter Maxwell. 1893. 74 pp.
- 37 No. 37. Record of experiments with sorghum in 1892; by Harvey W. Wiley, with collaboration of A. A. Denton, Glen O'Brien, C. I. Hinman, Wibray J. Thompson, J. L. Fuelling, and Oma Carr. 1893. 100 pp.
- ✓ 38 No. 38. Proceedings of 10th annual convention of Association of Official Agricultural Chemists, Chicago, Ill., Aug. 24-26, 1893; edited by Harvey W. Wiley. 1893. vi+218+vii-xiv pp.
- 39 No. 39. Experiments with sugar beets in 1893; by Harvey W. Wiley, with collaboration of Walter Maxwell. 1894. 59 pp.
- 40 No. 40. Record of experiments with sorghum in 1893; by Harvey W. Wiley, with collaboration of Oma Carr and C. I. Hinman. 1894. 38 pp.
- 41 No. 41. Extent and character of food and drug adulteration; by Alex. J. Wedderburn. 1894. 64 pp.
- 42 No. 42. Compilation of pharmacy and drug laws of the several states and territories; by Alex. J. Wedderburn. 1894. 152 pp.
- 43 No. 43. Proceedings of 11th annual convention of Association of Official Agricultural Chemists, Aug. 23-25, 1894; edited by Harvey W. Wiley. 1894. 403 pp.



Classification  
no.**A7. CHEMISTRY BUREAU—Continued****A7.3: Bulletins—Continued**

- 44 No. 44. Sweet cassava; its culture, properties, and uses; by Harvey W. Wiley. 1894. 16 pp. 2 pl.
- 45 No. 45. Analyses of cereals collected at World's Columbian Exposition, and comparisons with other data; by Harvey W. Wiley. 1895. 57 pp.
- 46<sup>1</sup> No. 46. Methods of analysis adopted by Association of Official Agricultural Chemists, Sept. 5-7, 1895; edited by Harvey W. Wiley, with collaboration of L. L. Van Slyke and W. D. Bigelow. 1895. 84 pp.  
*See also A7.4:4.*
- 46<sup>2</sup> No. 46, rev. ed. Methods of analysis adopted by Association of Official Agricultural Chemists, Nov. 11, 12, 14, 1898; edited by Harvey W. Wiley. 1899. 86 pp.
- 47 No. 47. Proceedings of 12th annual convention of Association of Official Agricultural Chemists, Sept. 5-7, 1895; edited by Harvey W. Wiley. 1895. 172 pp.
- 48 No. 48. Zinc in evaporated apples; by Harvey W. Wiley. 1896. 38 pp.
- 49<sup>1</sup> No. 49. Proceedings 13th annual convention Association of Official Agricultural Chemists, Nov. 6, 7, 9, 1896; edited by H. W. Wiley. 1897. 127 pp.
- 49<sup>2</sup> Same, [another print; letter of transmittal and list of illustrations omitted]. 127 pp.  
*See also A7.4:2 and A7.4:4.*
- 50 No. 50. Composition of maize (Indian corn), including grain, meal, stalks, pith, fodder, and cobs; compiled by H. W. Wiley. 1898. 31 pp.  
*See also for French abstract of this Bull., A7.4:6.*
- 51 No. 51. Proceedings of 14th annual convention of Association of Official Agricultural Chemists, Oct. 26-28, 1897; edited by Harvey W. Wiley. 1898. 169 pp.  
*See also A7.4:4.*
- 52<sup>1</sup> No. 52. Experiments with sugar beets in 1897; by Harvey W. Wiley. 1898. 165 pp. 2 maps.
- 52<sup>2</sup> Same, revised. 1899. 165 pp. 2 maps.
- 53 No. 53. Chemical composition of carcasses of pigs; by Harvey W. Wiley, with collaboration of E. E. Ewell, W. H. Krug, T. C. Trescot, and others. 1898. 80 pp.
- 54 No. 54. Investigation of analytical methods for distinguishing between nitrogen of proteids and that of simpler amids or amido-acids, by J. W. Mallet; with chapter on Separation of flesh bases from proteid matters by means of bromin, by H. W. Wiley. 1898. 30 pp.
- 55 No. 55. Fertilizing value of street sweepings; by Ervin E. Ewell. 1898. 19 pp.
- 56 No. 56. Proceedings of 15th annual convention of Association of Official Agricultural Chemists, Washington, D. C., Nov. 11, 12, 14, 1898; edited by Harvey W. Wiley. 1899. 140 pp.
- 57 No. 57. Proceedings of 16th annual convention of Association of Official Agricultural Chemists, San Francisco, July 5-7, 1899; edited by Harvey W. Wiley. 1899. 130 pp.
- 58 No. 58. Manufacture of starch from potatoes and cassava; by Harvey W. Wiley. 1900. 48 pp. 8 pl.
- 59 No. 59. Composition of American wines; by W. D. Bigelow. 1900. 76 pp.
- 60 No. 60. Sunflower plant, its cultivation, composition and uses; by Harvey W. Wiley. 1901. 31 pp. 1 pl.
- 61 No. 61. Pure-food laws of European countries affecting American exports; by W. D. Bigelow. 1901. 39 pp.
- 62 No. 62. Proceedings of 17th annual convention Association of Official Agricultural Chemists, Washington, Nov. 16, 17, 19, 1900; edited by H. W. Wiley. 1901. 163 pp. 2 pl.
- 63 No. 63. Exhibit of Bureau at Pan-American Exposition, Buffalo, N. Y., 1901; by E. E. Ewell, W. D. Bigelow, and Logan Waller Page. 1901. 29 pp. 4 pl.
- 64 No. 64. Influence of environment upon composition of sugar beet; by Harvey W. Wiley. 1901. 32 pp.

## Tables

Classification  
no.

### A7. CHEMISTRY BUREAU—Continued

#### A7.3: Bulletins—Continued

- 65 No. 65. Provisional methods for analysis of foods adopted by Association of Official Agricultural Chemists, Nov. 14-16, 1901; edited by H. W. Wiley, with collaboration of W. D. Bigelow. 1902. 169 pp.
- 66 No. 66. Fruits and fruit products, chemical and microscopical examination; [Pt. 1], by L. S. Munson [and] L. M. Tolman; [Pt. 2, by] Burton J. Howard. 1902. 114 pp. 12 pl.
- 67 No. 67. Proceedings of 18th annual convention of Association of Official Agricultural Chemists, held at Washington, D. C., Nov. 14-16, 1901; edited by Harvey W. Wiley. 1902. 184 pp. 1 por.
- 68 No. 68. Chemical composition of insecticides and fungicides, with an account of methods of analysis employed; by J. K. Haywood, in cooperation with Division of Entomology. 1902. 62 pp.
- 69<sup>1</sup> No. 69. Pt. 1. Foods and food control, [no.] 1; by W. D. Bigelow. 1902. vi+93 pp.
- 69<sup>2</sup> Same, Pt. 2, [no.] 2. 1902. vi+95-187 pp.
- 69<sup>3</sup> Same, Pt. 3, [no.] 3. 1902. vi+189-272 pp.
- 69<sup>4</sup> Same, Pt. 4, [no.] 4. 1902. vi+273-372 pp.
- 69<sup>5</sup> Same, Pt. 5, [no.] 5. 1902. vi+373-461 pp.
- 70 No. 70. Manufacture of table sirups from sugar cane; by H. W. Wiley. 1902. 32 pp. 10 pl.

#### A7.3<sup>a</sup>: Bulletins (separates)

[A few of the papers contained in the Bulletins were issued separately in pamphlet form. References to all the papers will be found under their proper headings in the index to this work.]

#### A7.4: Circulars

- 1 No. 1. Manufacture of sorghum sirup; by G. L. Spencer. July 15, 1894. n. t. p. 3 pp.
- 2 No. 2. Changes in and additions to methods of analysis adopted at 13th annual meeting of Association of Official Agricultural Chemists. Dec. 12, 1896. n. t. p. 6 pp.
- 3<sup>1</sup> No. 3. Needed reforms in fertilizer inspection; by H. J. Wheeler, H. P. Armsby, C. D. Woods, H. W. Wiley. July 8, 1897. n. t. p. 3 pp.
- 3<sup>2</sup> Same, revised. n. d. n. t. p. 4 pp.
- 3<sup>3</sup> Same, 2d rev. ed. Mar. 20, 1902. n. t. p. 4 pp.
- ✓4 No. 4 (to accompany bulletin 46). Changes in and additions to methods of analysis adopted at 13th and 14th annual meetings Association of Official Agricultural Chemists. Dec. 11, 1897. n. t. p. 10 pp.
- 5 No. 5. Chemical examination of canned meats; by H. W. Wiley. Jan. 18, 1899. n. t. p. 7 pp.
- 6 No. 6. Composition chimique du maïs et de ses produits; par M. H. W. Wiley. June 22, 1900. (French abstract of Chem. Bull. 50, Composition of maize; by H. W. Wiley.) July 21, 1900. 13 pp.
- 7<sup>1</sup> No. 7. Outline of work on foods and feeding stuffs for 1901; by William H. Krug. Apr. 29, 1901. n. t. p. 3 pp.
- 7<sup>2</sup> Same, revised ed. Apr. 18, 1902. (Title changed to "Amended methods adopted at 18th annual convention of Association of Official Agricultural Chemists.") n. t. p. 3 pp.
- 8<sup>1</sup> No. 8. Official method for analysis of tanning materials. Nov. 19, 1901. n. t. p. 2 pp.
- 8<sup>2</sup> Same, Dec. 18, 1902. n. t. p. 2 pp.
- 9 No. 9. Plan for cooperating in study of available plant food; by C. C. Moore. Jan. 3, 1902. n. t. p. 8 pp.
- 10 No. 10. Methods for analysis of insecticides and fungicides; by J. K. Haywood. Mar. 7, 1902. n. t. p. 8 pp.

### A8. ENTOMOLOGICAL COMMISSION

[Formerly under Interior Department, see I 26.]

#### A8.1: Annual reports

1st annual report on Rocky Mountain locust. Issued as a publication of the Geological and Geographical Survey of the Territories (Hayden). See I26.1:1.

Classification  
no.

## AS. ENTOMOLOGICAL COMMISSION—Continued

### AS.1: Annual reports—Continued

2d report on Rocky Mountain locust and Western cricket. Issued as a publication of the Interior Department, the report being made direct to the Secretary.

See I26.1:2.

- 3 3d report of U. S. Entomological Commission relating to Rocky Mountain locust, Western cricket, Army worm, canker worms, and Hessian fly, with descriptions of larvæ of injurious forest insects, studies of embryological development of locust and of other insects, and on systematic position of orthoptera in relation to other orders of insects. 1883. xiv+347+12+92 pp. 63 pl. 4 maps.

Same, 47th Cong., 2d sess., H. mis. doc. 44; serial no. 2154.

- 4 4th report of U. S. Entomological Commission, being revised edition of Bulletin no. 3 and final report on cotton worm and boll worm; by Charles V. Riley. 1885. xxxviii+399+147 pp. 64 pl. 2 maps.

Same, 48th Cong., 2d sess., H. mis. doc. 39; serial no. 2325.

- 5 5th report of U. S. Entomological Commission, being revised and enlarged edition of Bulletin no. 7 on insects injurious to forest and shade trees; by Alpheus S. Packard. 1890. viii+957 pp. 40 pl.

Same, 51st Cong., 1st sess., H. mis. doc. 269; serial no. 2800.

[Discontinued.]

### AS.2: General publications

None issued.

### AS.3: Bulletins

[Nos. 1 and 2 made under direction of U. S. Geological and Geographical Survey of the Territories (Hayden); Nos. 3-7 under direction of Interior Department. None issued under Agriculture Department].

See I26:3.

### AS.4: Circulars

[None issued under Agriculture Department. Twelve circulars issued under Interior Department. See I26:4].

## A9. ENTOMOLOGY DIVISION

[For historical sketch of Division, see Yearbook 1897 (A1.10:897), p. 84.]

### A9.1: Annual reports

#### REPORT OF ENTOMOLOGIST

1863 (Glover). (In A1.1:863, p. 561.)

1864 (Glover). (In A1.1:864, p. 540.)

1865 (Glover). (In A1.1:865, p. 33.)

1866 (Glover). (In A1.1:866, p. 27.)

1867 (Glover). (In A1.1:867, p. 58.)

1868 (Glover). Title: Foods and habits of beetles. (In A1.1:868, p. 78.)

1869 (Glover). (In A1.1:869, p. 60.)

#### REPORT OF ENTOMOLOGIST AND CURATOR OF MUSEUM

1870 (Glover). (In A1.1:870, p. 65.)

1871 (Glover). (In A1.1:871, p. 69.)

1872 (Glover). (In A1.1:872, p. 112.)

1873 (Glover). (In A1.1:873, p. 152.)

1874 (Glover). (In A1.1:874, p. 122.)

#### REPORT OF ENTOMOLOGIST

1875 (Glover). (In A1.1:875, p. 114.)

#### REPORT OF ENTOMOLOGIST AND CURATOR OF MUSEUM

1876 (Glover). (In A1.1:876, p. 17.)

1877 (Glover). (In A1.1:877, p. 89.)

1878 (none issued).

#### REPORT OF ENTOMOLOGIST

- 879 1879 (Riley), from June, 1878, to Mar. 1, 1879. 52+[1] pp. 7 pl. (Also in A1.1:878, p. 207.)

1880 (Comstock), submitted June 30, 1880. (In A1.1:879, p. 185.)

- 881 1881 (Comstock), submitted June 15, 1881. iv+235-373+iv pp. 24 pl. (Also in A1.1:880, p. 235.)



## Tables

Classifica-  
tion no.

## A9. ENTOMOLOGY DIVISION—Continued

### A9.1: Annual reports—Continued

- 882 1882 (Riley), submitted June 30, 1882. viii+167 pp. 20 pl. (Also in A1.1:881-2, p. 61.) [Pages 1-154 bear also the paging of the Secretary's report "61-214."]
- 883 1883 (Riley), submitted July 31, 1883. v+99-180+5+[2] pp. 13 pl. (Also in A1.1:883, p. 99.)
- 884 1884 (Riley), submitted Nov. 3, 1884. vii+[1]+134+2+ix pp. 10 pl. (Also in A1.1:884, p. 285.) [Pages 1-134 bear also the paging of the Secretary's report "285-418."]
- 885 1885 (Riley), submitted Dec. 24, 1885. vii+[1]+137+vii+2 pp. 2 l. ix pl. 1 map. (Also in A1.1:885, p. 207.) [Pages 1-137 bear also the paging of the Secretary's report "207-343."]
- 886 1886 (Riley), [submitted] Dec. 24, 1886. v+459-592+ix pp. 11 pl. (Also in A1.1:886, p. 459.)
- 887 1887 (Riley), submitted Jan. 30, 1888. vi+48-179+vi pp. 8 pl. (Also in A1.1:887, p. 48.)
- 888 1888 (Riley), submitted Jan. 31, 1889. iv+53-144 pp. 12 pl. (Also in A1.1:888, p. 53.)
- 889 1889 (Riley), submitted Dec. 31, 1889. iv+331-361+iii pp. 6 pl. (Also in A1.1:889, p. 331.)
- 890 1890 (Riley), for calendar year. [1]+237-264 pp. 7 pl. (Also in A1.1:890, p. 237.)
- 891 1891 (Riley), for calendar year. iii+231-266+ii pp. (Also in A1.1:891, p. 231.)
- 892 1892 (Riley), calendar year. iii+153-180+ii pp. 12 pl. (Also in A1.1:892, p. 153.)
- 893 1893 (Riley), calendar year. iii+199-226+ii pp. 4 pl. (Also in A1.1:893, p. 199.)
- 1894 (Howard), from June 30, 1893, to June 30, 1894. (In A1.1:894, p. 157.)
- 1895 (Howard), fiscal year. (In A1.1:895, p. 153.)
- 896 1896 (Howard), fiscal year. iii+89-93 pp. (Also in A1.1:896, p. 89.)
- 897 1897 (Howard), fiscal year. ii+111-116 pp. (Also in A1.1:897, p. 111.)
- 898 1898 (Howard), fiscal year. iii+17-25 pp. (Also in A1.1:898, p. 17.)
- 899 1899 (Howard), fiscal year. iii+43-52 pp. (Also in A1.1:899, p. 43.)
- 900 1900 (Howard), fiscal year. iii+27-34 pp. (Also in A1.1:900, p. 27.)
- 901 1901 (Howard), fiscal year. ii+141-150 pp. (Also in A1.1:901, p. 141.)
- 902 1902 (Marlatt), fiscal year. iii+189-207 pp. (Also in A1.1:902, p. 189.)

### A9.2: General publications

[Publications which originated in this Division, but which were published in a numbered series of the Secretary's Office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the Index to this work. Publications of the Division, issued only as Congressional documents, are noted in chronological order in the Appendix to this work.]

- B47<sup>1-3</sup> Bibliography of more important contributions to American economic entomology; prepared by Samuel Henshaw. Pts. 1-3, more important writings of Benjamin Dann Walsh and Charles Valentine Riley. 1890. [1]+454 pp.
- Contents:  
Pt. 1. More important writings of Benjamin Dann Walsh. 1889. 50 pp.  
Pt. 2. More important joint writings of B. D. Walsh and C. V. Riley. 1889. pp. 51-96.  
Pt. 3. More important writings of Charles Valentine Riley. 1889. pp. 97-371.  
Index to Parts 1-3. 1890. pp. [1]+373-454.  
Same, 51st Cong., 1st sess., H. mis. doc. 133; serial no. 2768.
- B47<sup>4</sup> Same. Pt. 4. More important writings of Government and State entomologists, and of other contributors to literature of American Economic Entomology. A-K. 1895. 167 pp.
- B47<sup>5</sup> Same. Pt. 5. L-Z. 1896. 179 pp.
- B47<sup>6</sup> Same. Pt. 6. More important writings published between June 30, 1888, and Dec. 30, 1896; prepared by Nathan Banks. 1898. 273 pp.
- B47<sup>7</sup> Same. Pt. 7. More important writings published between Dec. 31, 1896, and Jan. 1, 1900; by Nathan Banks. 1901. 113 pp.
- C82 Cotton insects. Report upon cotton insects; by J. Henry Comstock. 1879. v+511 pp. 3 pl.

Classifica-  
tion no.**A9. ENTOMOLOGY DIVISION—Continued****A9.2: General publications—Continued**

- N42 New Orleans Exposition. Catalogue of exhibit of economic entomology at New Orleans World's Industrial and Cotton Centennial Exposition, 1884-5. 1888. 95 pp.
- Or 1 Orange. Report on insects affecting the orange and other plants of citrus family, with practical suggestions for their control or extermination; by H. G. Hubbard. 1885. 227 pp. 14 pl.  
Same, 48th Cong., 2d sess., H. mis. doc. 40; serial no. 2326.
- P41 [Periodical cicada, or seventeen-year locust; by C. V. Riley.] May, 1894. n. t. p. {3} pp. 4°

**A9.3: Bulletins (old series)**

- ✓ 1<sup>1</sup> No. 1. Reports of experiments, chiefly with kerosene, upon insects injuriously affecting orange tree and cotton plant. 1883. 62 pp.
- ✓ 1<sup>2</sup> Same, 2d edition. 1883. 62 pp.
- 2<sup>1</sup> No. 2. Reports and observations on Rocky Mountain locust and chinch bug, with extracts from correspondence of the Division on miscellaneous insects. 1883. 36 pp.
- ✓ 2<sup>2</sup> Same, 2d edition. 1883. 36 pp.
- ✓ 3 No. 3. Reports of observations and experiments in practical work of the Division, made under direction of the Entomologist. 1883. 75 pp. 3 pl.
- 4 No. 4. Reports of observations and experiments in practical work of the Division, made under direction of the Entomologist, with extracts from correspondence on miscellaneous insects. 1884. 102 pp.
- 5 No. 5. Descriptions of North American chalcididae, from collections of Department of Agriculture and C. V. Riley, with biological notes. [1st paper], with list of described North American species of this family; by L. O. Howard. 1885. 47 pp.
- 6<sup>1</sup> No. 6. Imported elm leaf beetle; its habits and natural history, and means of counteracting its injuries. 1885. 20 pp. 1 pl.
- 6<sup>2</sup> Same, 2d ed. 1891. 21 pp. 1 pl.
- 7 No. 7. Pediculi and mallophaga affecting man and lower animals; by Herbert Osborn. 1891. 56 pp.
- 8<sup>1</sup> No. 8. Periodical cicada; an account of *Cicada septemdecim* and its tredecim race, with chronology of broods known; by Charles V. Riley.\*
- 8<sup>2</sup> Same, 2d edition. 1885. 46 pp.
- ✓ 9<sup>1</sup> No. 9. Mulberry silk-worm; being a manual of instructions in silk culture; by C. V. Riley. 6th rev. ed. 1886. vii+65 pp. 2 pl.
- ✓ 9<sup>2</sup> Same, 7th rev. ed. 1888. vii+65 pp. 2 pl. [For editions 1 to 5, see A1.6:11.]
- 10 No. 10. Our shade trees and their insect defoliators, being a consideration of four most injurious species which affect trees of the Capital, with means of destroying them; by C. V. Riley. 1887. 69 pp.
- 11 No. 11. Reports of experiments with various insecticide substances, chiefly upon insects affecting garden crops. 1886. 34 pp.
- 12 No. 12. Miscellaneous notes on work of Division of Entomology for season of 1885. 1886. 46 pp. 1 pl.
- 13 No. 13. Reports of observations and experiments in practical work of the Division, made under direction of the Entomologist. 1887. 78 pp.
- 14 No. 14. Reports of observations and experiments in practical work of the Division. 1887. [Additional to no. 13.] 62 pp. 1 pl.
- 15 No. 15. *Icerya* or fluted scale, otherwise known as cottony cushion-scale. 1887. 40 pp.
- 16 No. 16. Entomological writings of Alpheus Spring Packard; by Samuel Henshaw. 1887. 49 pp.
- 17 No. 17. Chinch bug; general summary of its history, habits, enemies, and of remedies and preventives to be used against it; by L. O. Howard. 1888. [1]+48 pp.
- 18 No. 18. Life and entomological work of Townend Glover; by Charles Richards Dodge. 1888. 68 pp. 2 pl.
- 19 No. 19. Enumeration of published synopses, catalogues, and lists of North American insects, with other information intended to assist the student of American entomology. 1888. 77 pp.

\* No copy found.

## Tables

Classifica-  
tion no.

### A9. ENTOMOLOGY DIVISION—Continued

#### A9.3: **Bulletins** (old series)—Continued

- |                 |  |
|-----------------|--|
| 20              | No. 20. Root-knot disease of peach, orange, and other plants in Florida, due to work of anguillula; by J. C. Neal. 1889. 31 pp. 21 pl.   |
| 21 <sup>1</sup> | No. 21. Report of trip to Australia to investigate natural enemies of fluted scale; by Albert Koebele. 1890. 32 pp.  |
| 21 <sup>2</sup> | Same, rev. ed. 1890. 32 pp.  |
| 22              | No. 22. Reports of observations and experiments in practical work of the Division, made under direction of the Entomologist. 1890. 110 pp.   |
| 23              | No. 23. Reports of observations and experiments in practical work of the Division, under direction of the Entomologist. 1891. 83 pp.   |
| 24              | No. 24. Boll worm of cotton, report of progress in supplementary investigation of this insect; by F. W. Mally. 1891. 50 pp.  |
| 25              | No. 25. Destructive locusts, a popular consideration of a few of the more injurious locusts (or "grasshoppers") of U. S., with best means of destroying them; by C. V. Riley. 1891. 62 pp. 12 pl. 1 map. |
| 26              | No. 26. Reports of observations and experiments in practical work of the Division, made under direction of the Entomologist. 1892. 95 pp.  |
| 27              | No. 27. Reports on damage by destructive locusts during 1891. 1892. 64 pp.   |
| 28              | No. 28. More destructive locusts of America north of Mexico; by Lawrence Bruner. 1893. 40 pp.  |
| 29              | No. 29. Boll worm of cotton; by F. W. Mally. 1893. 73 pp. 2 pl.  |
| 30              | No. 30. Reports of observations and experiments in practical work of the Division, made under direction of the Entomologist. 1893. 67 pp.  |
| 31              | No. 31. Catalogue of exhibit of economic entomology at World's Columbian Exposition, Chicago, Ill., 1893. 1893. 121 pp.  |
| 32              | No. 32. Reports of observations and experiments in practical work of the Division, made under direction of the Entomologist. 1894. 59 pp.  |
| 33              | No. 33. Legislation against injurious insects, compilation of laws and regulations in United States and British Columbia; by L. O. Howard. 1895. 46 pp.  |

#### A9.4: **Circulars** (first series)

[NOTE.—This series is described as "a miscellaneous and indifferent series, hardly worthy to be entitled to the dignity of being considered publications." The whole number exceeded 40, nearly all being circular letters, and of which Nos. 1, 18, and 22 are the only ones known to exist.]

- |    |  |
|----|--|
| 1  | No. 1 c. [Relating to silk worm eggs.] n. d. (Circ.)                             |
| 18 | No. 18. [Establishment of branch of economic ornithology.] July 1, 1885. (Circ.) |
| 22 | No. 22. [Bee culture.] July 28, 1885. (Circ.)                                    |

#### A9.5: **Circulars, second series**

- |                |   |
|----------------|---|
| 1              | No. 1. Condensed information concerning some of the more important insecticides. May, 1891. 7 pp.   |
| 2 <sup>1</sup> | No. 2. Hop plant-louse, and the remedies to be used against it. June, 1891. 7 pp. 1 pl.   |
| 2 <sup>2</sup> | Same, [new ed. Aug. 1899.] 7 pp. 1 pl.  |
| 3              | No. 3. Important enemy to fruit trees; San Jose scale, its appearance in Eastern U. S.; measures to be taken to prevent its spread and to destroy it; by L. O. Howard. April 4, 1893. n. t. p. 10 pp. |
| 4              | No. 4. Army worm, circular relative to; by L. O. Howard. June 16, 1894. n. t. p. 5 pp.  |
| 5              | No. 5. Carpet beetle or "Buffalo moth"; by L. O. Howard. Sept. 8, 1894. n. t. p. 4 pp.  |
| 6 <sup>1</sup> | No. 6. Mexican cotton-boll weevil; by L. O. Howard. April 2, 1895. n. t. p. 5 pp.   |
| 6 <sup>2</sup> | Same, [Spanish ed.] 6 pp.<br>[For revision, see A9.5:14.]   |
| 7              | No. 7. Pear-tree psylla; by C. L. Marlatt. May 1, 1895. n. t. p. 8 pp.  |
| 8              | No. 8. Imported elm leaf-beetle; by C. L. Marlatt. May 23, 1895. n. t. p. 4 pp.   |
| 9              | No. 9. Canker-worms; by D. W. Coquillett. May 24, 1895. n. t. p. 4 pp.  |

Classifica-  
tion no.**A9. ENTOMOLOGY DIVISION—Continued****A9.5: Circulars, second series—Continued**

- 10 No. 10. Harlequin cabbage bug, or Calico back; by L. O. Howard. May 24, 1895. n. t. p. 2 pp.
- 11 No. 11. Rose-chaffer; by F. H. Chittenden. May 21, 1895. n. t. p. 4 pp.
- 12<sup>1</sup> No. 12. Hessian fly; by C. L. Marlatt. July 26, 1895. n. t. p. 4 pp.
- 12<sup>2</sup> Same, rev. ed. Apr. 13, 1900. n. t. p. 4 pp.
- 13<sup>1</sup> No. 13. Mosquitoes and fleas; by L. O. Howard. Feb. 1, 1896. n. t. p. 4 pp.
- 13<sup>2</sup> Same, rev. ed. Nov. 15, 1897. n. t. p. 5 pp.
- 14<sup>1</sup> No. 14. (Revision of No. 6.) Mexican cotton-boll weevil; by L. O. Howard. Feb. 12, 1896. n. t. p. 8 pp.
- 14<sup>2</sup> Same, [Spanish edition.] n. t. p. 8 pp.  
[For revision, see A9.5:18.]
- 15 No. 15. General work against insects which defoliate shade trees in cities and towns; by L. O. Howard. Mar. 6, 1896. n. t. p. 4 pp.  
[In advance, from article "Shade-tree insect problem in Eastern U. S.," published in Yearbook for 1895.]
- 16 No. 16. Larger corn stalk-borer; by L. O. Howard. Aug. 13, 1896. n. t. p. 3 pp.
- 17 No. 17. Peach-tree borer; by C. L. Marlatt. Sept. 30, 1896. n. t. p. 4 pp.
- 18<sup>1</sup> No. 18. Mexican cotton-boll weevil. Revision of No. 14. Feb. 4, 1897. n. t. p. 8 pp.
- 18<sup>2</sup> Same. [Spanish edition.] n. t. p. 10 pp.
- 18<sup>3</sup> Same. [German edition.] n. t. p. 11 pp.
- 19<sup>1</sup> No. 19. Clover mite; by C. L. Marlatt. Mar. 5, 1897. n. t. p. 4 pp.
- 19<sup>2</sup> Same, 2d ed. July 19, 1897. n. t. p. 4 pp.
- 20 No. 20. Woolly aphis of apple; by C. L. Marlatt. Mar. 15, 1897. n. t. p. 6 pp.
- 21 No. 21. Strawberry weevil; by F. H. Chittenden. Mar. 18, 1897. n. t. p. 7 pp.
- 22 No. 22. Periodical cicada in 1897; by E. A. Schwarz. May 1, 1897. n. t. p. 4 pp.
- 23 No. 23. Buffalo tree-hopper; by C. L. Marlatt. May 10, 1897. n. t. p. 4 pp.
- 24 No. 24. Two-lined chestnut borer; by F. H. Chittenden. July 14, 1897. n. t. p. 8 pp.
- 25 No. 25. Ox warble; by C. L. Marlatt. July 19, 1897. n. t. p. 10 pp.
- 26 No. 26. Pear slug; by C. L. Marlatt. Aug. 28, 1897. n. t. p. 7 pp.
- 27 No. 27. Mexican cotton-boll weevil in 1897; by L. O. Howard. Dec. 31, 1897. n. t. p. 7 pp.
- 28 No. 28. Box-elder plant-bug; by L. O. Howard. Jan. 8, 1898. n. t. p. 3 pp.
- 29 No. 29. Fruit-tree bark-beetle; by F. H. Chittenden. Mar. 25, 1898. n. t. p. 8 pp.
- 30 No. 30. Periodical cicada in 1898; by E. A. Schwarz. Apr. 1, 1898. n. t. p. 3 pp.
- 31 No. 31. Striped cucumber beetle; by F. H. Chittenden. Apr. 26, 1898. n. t. p. 7 pp.
- 32<sup>1</sup> No. 32. Larger apple-tree borers; by F. H. Chittenden. July 1, 1898. n. t. p. 12 pp.
- 32<sup>2</sup> Same, revised edition. Aug. 30, 1902. n. t. p. 12 pp.
- 33 No. 33. Remedial work against Mexican cotton-boll weevil; by L. O. Howard. July 1, 1898. n. t. p. 6 pp.
- 34 No. 34. House ants; by C. L. Marlatt. July 6, 1898. n. t. p. 4 pp.
- 35 No. 35. House flies; by L. O. Howard. July 11, 1898. n. t. p. 8 pp.
- 36 No. 36. True clothes moths; by C. L. Marlatt. July 18, 1898. n. t. p. 8 pp.
- 37<sup>1</sup> No. 37. Use of hydrocyanic acid gas for fumigating greenhouses and cold frames; by Albert F. Woods and P. H. Dorsett. Jan. 10, 1899. n. t. p. 10 pp.
- 37<sup>2</sup> Same, corrected print. [Compare page 8.] Jan. 10, 1899. n. t. p. 10 pp.

## Tables

Classifica-  
tion no.

## A9. ENTOMOLOGY DIVISION—Continued

### A9.5: Circulars, second series—Continued

- 38 No. 38. Squash-vine borer; by F. H. Chittenden. Apr. 22, 1899. n. t. p. 6 pp.
- 39 No. 39. Common squash bug; by F. H. Chittenden. Apr. 27, 1899. n. t. p. 5 pp.
- 40<sup>1</sup> No. 40. How to distinguish different mosquitoes of North America; by L. O. Howard [with synoptical table of mosquitoes; by D. W. Coquillett]. Feb. 20, 1900. n. t. p. 7 pp.
- 40<sup>2</sup> Same [1901], 2d print. n. t. p. 8 pp.
- 41 No. 41. Regulations of foreign governments regarding importation of American plants, trees, and fruits; by L. O. Howard. Aug. 24, 1900. n. t. p. 4 pp.
- 42<sup>1</sup> No. 42. How to control San Jose scale; by C. L. Marlatt. Oct. 22, 1900. n. t. p. 6 pp.
- 42<sup>2</sup> Same, revised. May 17, 1902.
- 43 No. 43. Destructive green pea louse; by F. H. Chittenden. May 23, 1901. n. t. p. 8 pp.
- 44 No. 44. Periodical cicada in 1902; by W. D. Hunter. Mar. 13, 1902. n. t. p. 4 pp.
- 45 No. 45. New nomenclature for broods of periodical cicada; by C. L. Marlatt. May 1, 1902. n. t. p. 8 pp.
- 46 No. 46. Hydrocyanic-acid gas against household insects; by L. O. Howard. May 22, 1902. n. t. p. 4 pp.
- 47 No. 47. The bedbug; by C. L. Marlatt. June 15, 1902. n. t. p. 8 pp.
- 48 No. 48. House centipede; by C. L. Marlatt. June 10, 1902. n. t. p. 4 pp.
- 49 No. 49. Silver fish; by C. L. Marlatt. June 20, 1902. 4 pp.
- 50 No. 50. White ant; by C. L. Marlatt. June 30, 1902. n. t. p. 8 pp.
- 51 No. 51. Cockroaches; by C. L. Marlatt. June 23, 1902. n. t. p. 15 pp.

### A9.6: Bulletins, new series

- 1<sup>1</sup> No. 1. Honeybee, a manual of instruction in apiculture; by Frank Benton. 1895. 118 pp. 12 pl.
- 1<sup>2</sup> Same, rev. ed. 1896. 118 pp. 12 pl.
- 1<sup>3</sup> Same, 3d ed. 1899. 118 pp. 12 pl.
- Same, 54th Cong., 1st sess., H. doc. 359; serial no. 3435.
- 2 No. 2. Proceedings of 7th annual meeting of Association of Economic Entomologists [Springfield, Mass., 1895]. 1895. 100 pp.
- 3 No. 3. San Jose scale, its occurrences in U. S., with full account of its life history and remedies to be used against it; by L. O. Howard and C. L. Marlatt. 1896. 80 pp.
- 4<sup>1</sup> No. 4. Principal household insects of U. S., by L. O. Howard and C. L. Marlatt; with chapter on insects affecting dry vegetable foods, by F. H. Chittenden. 1896. 130 pp.
- 4<sup>2</sup> Same, revised edition. 1896 [1899]. 131 pp.
- 5 No. 5. Insects affecting domestic animals, an account of species of importance in North America, with mention of related forms occurring on other animals; by Herbert Osborn. 1896. 302 pp. 5 pl.
- 6 No. 6. Proceedings of 8th annual meeting Association of Economic Entomologists. 1896. 100 pp.
- 7 No. 7. Some miscellaneous results of work of Division of Entomology [1]. 1897. 87 pp.
- 8 No. 8. Some little known insects affecting stored vegetable products: a collection of articles detailing certain original observations made upon insects of this class; by F. H. Chittenden. 1897. 45 pp.
- 9 No. 9. Proceedings 9th annual meeting of Association of Economic Entomologists. 1897. 87 pp.
- 10 No. 10. Some miscellaneous results of work of Division of Entomology [2]. 1898. 99 pp.
- 11 No. 11. Gipsy moth in America, a summary account of introduction and spread of *Porthetria dispar* in Massachusetts and of efforts made to repress and exterminate it; by L. O. Howard. 1897. 39 pp.
- 12 No. 12. San Jose scale, 1896-97; by L. O. Howard. 1898. 31 pp.

Classifica-  
tion no.**A9. ENTOMOLOGY DIVISION—Continued****A9.6: Bulletins, new series—Continued**

- 13 No. 13. Recent laws against injurious insects in North America, with laws relative to foul brood; compiled by L. O. Howard. 1898. 68 pp.
- 14 No. 14. Periodical cicada, an account of *Cicada septendecim*, its natural enemies and means of preventing its injury, with summary of distribution of different broods; by C. L. Marlatt. 1898. 148 pp. 1 leaf. 4 pl.
- 15 No. 15. Chinch bug, its probable origin and diffusion, its habits and development, natural checks and remedial and preventive measures, with mention of habits of an allied European species; by F. M. Webster. 1898. 82 pp.
- 16 No. 16. Hessian fly in United States; by Herbert Osborn. 1898. 58 pp. 3 pl.
- 17 No. 17. Proceedings 10th annual meeting Association of Economic Entomologists. 1898. 104 pp.
- 18 No. 18. Some miscellaneous results of work of Division of Entomology, 3. 1898. 101 pp.
- 19 No. 19. Some insects injurious to garden and orchard crops; by F. H. Chittenden. 1899. 99 pp.
- 20 No. 20. Proceedings 11th annual meeting Association of Economic Entomologists. 1899. 111 pp.
- 21 No. 21. Preliminary report on insect enemies of forests in northwest, an account of results gained from a reconnoissance trip made in spring and early summer of 1899; by A. D. Hopkins. 1899. 27 pp.
- 22 No. 22. Some miscellaneous results of work of Division of Entomology, 4. 1900. 109 pp.
- 23 No. 23. Some insects injurious to garden crops; by F. H. Chittenden. 1900. 92 pp.
- 24 No. 24. List of works on North American entomology; compiled by Nathan Banks. 1900. 95 pp.
- 25 No. 25. Notes on mosquitoes of U. S., giving some account of their structure and biology, with remarks on remedies; by L. O. Howard. 1900. 70 pp.
- 26 No. 26. Proceedings 12th annual meeting Association of Economic Entomologists. 1900. 102 pp. 2 pl.
- 27<sup>1</sup> No. 27. Some insects injurious to violet, rose, and other ornamental plants; by F. H. Chittenden. 1901. 114 pp. 4 pl.
- 27<sup>2</sup> Same, revised ed. 1901. 114 pp. 4 pl.
- 28 No. 28. Insect enemies of spruce in northeast, a popular account of results of special investigations, with recommendations for preventing losses; by A. D. Hopkins. 1901. 80 pp. 16 pl.
- 29 No. 29. Fall army worm and variegated cutworm; by F. H. Chittenden. 1901. 64 pp.
- 30 No. 30. Some miscellaneous results of work of Division of Entomology, 5. 1901. 98 pp. 2 pl.
- 31 No. 31. Proceedings of 13th annual meeting of Association of Economic Entomologists [1901]. 1902. 103 pp. 2 pl.
- 32 No. 32. Insect enemies of pine in Black Hills Forest Reserve, an account of results of special investigations, with recommendations for preventing losses; by A. D. Hopkins. 1902. 24 pp. 7 pl.
- 33 No. 33. Some insects injurious to vegetable crops; by F. H. Chittenden. 1902. 117 pp.
- 34 No. 34. Principal insects liable to be distributed on nursery stock; by Nathan Banks. 1902. 46 pp.
- 35 No. 35. Report on codling-moth investigations in northwest during 1901; by C. B. Simpson. 1902. 29 pp. 5 pl.
- 36 No. 36. An index to Bulletins Nos. 1-30 (new series 1896-1901) of Division of Entomology; compiled by Nathan Banks. 1902. 64 pp.
- 37 No. 37. Proceedings of 14th annual meeting of Association of Economic Entomologists. 1902. 127 pp. 1 pl.
- 38 No. 38. Some miscellaneous results of work of Division of Entomology, 6. 1902. 110 pp. 2 pl.



**Tables**Classifica-  
tion no.**A9. ENTOMOLOGY DIVISION—Continued****A9.6<sup>a</sup>: Bulletins, new series (separates)**

[A few of the more important papers contained in the bulletins were issued separately. References to *all* the papers will be found under their proper headings in the Index to this work.]

**A9.7: Insect life**

[In indexing these volumes for this work the "notes" were all disregarded.]

- 1 V. 1. Periodical bulletin, July, 1888, to June, 1889. [Nos. 1-12.]  
No. 1. July, 1-32 pp.  
No. 2. Aug., 2+33-62 pp.  
No. 3. Sept., [2]+63-92 pp.  
No. 4. Oct., 2+93-122 pp.  
No. 5. Nov., [2]+123-162 pp.  
No. 6. Dec., 2+163-200 pp.  
No. 7. Jan., 2+201-230 pp.  
No. 8. Feb., ii+231-260 pp.  
No. 9. Mar., ii+261-295 pp.  
No. 10. Apr., ii+297-326 pp.  
No. 11. May, ii+327-357 pp.  
No. 12. June, 2+359-388. [Title page, table of contents, and index for vol. 1 issued with this number. xxxii pp.]
- 2 V. 2. Periodical bulletin, July, 1889, to June, 1890. [12 numbers in 10.]  
No. 1. July, 2+30 pp.  
No. 2. Aug., ii+31-60 pp.  
No. 3. Sept., ii+61-90 pp.  
No. 4. Oct., ii+91-123 pp.  
No. 5. Nov., ii+125-162 pp.  
No. 6. Dec., ii+163-197 pp.  
Nos. 7 and 8. Jan. and Feb., ii+199-262 pp.  
No. 9. Mar., ii+263-292 pp.  
No. 10. Apr., ii+293-333 pp.  
Nos. 11 and 12. May and June, ii+335-390 pp.  
[Title page, table of contents, and index issued with no. 1 of vol. 3.]
- 3 V. 3. Periodical bulletin, August, 1890, to August, 1891. [12 numbers in 8.]  
No. 1. Aug., ii+41 pp. [Title page, table of contents, and index for vol. 2 issued with this number, viii+391-418 pp.]  
No. 2. Sept., ii+41-87 pp.  
No. 3. Nov., ii+89-129 pp.  
No. 4. Nov., ii+131-178 pp.  
No. 5. Jan., ii+179-250 pp.  
No. 6. Mar., ii+251-304 pp.  
Nos. 7 and 8. Apr., ii+305-357 pp.  
Nos. 9 and 10. June, ii+359-432 pp.  
Nos. 11 and 12. Aug., ii+433-519 pp. [Title page and table of contents for vol. 3 issued with this number, viii pp.]
- 4 V. 4. Periodical bulletin, October, 1891, to August, 1892. [12 numbers in 6.]  
Nos. 1 and 2. Oct., iv+86 pp.  
Nos. 3 and 4. Nov., iv+87-162 pp.  
Nos. 5 and 6. Dec., iii+163-230 pp.  
Nos. 7 and 8. April, ii+231-292 pp.  
Nos. 9 and 10. June, ii+293-352 pp.\*  
Nos. 11 and 12. Aug., iii+353-441 pp. [Title page and table of contents for vol. 4 issued with this number, viii pp.]
- 5 V. 5. Periodical bulletin, September, 1892, to July, 1893. [Nos. 1-5.]  
No. 1. Sept., iii+62 pp.  
No. 2. Nov., iii+63-146 pp.  
No. 3. Jan., iii+147-212 pp.  
No. 4. Apr., iii+213-288 pp.  
No. 5. July, iii+289-402 pp. [Title page and table of contents for vol. 5 issued with this number, vii pp.]

\*The unbound serial numbers of this issue could not be found. As bound in the volumes the lettered pages are omitted, and could not therefore be verified.

Classification  
no.

**A9. ENTOMOLOGY DIVISION—Continued**

**A9.7: Insect life—Continued**

- 6 V. 6. Periodical bulletin, November, 1893, to August [September], 1894.  
[Nos. 1-5.]  
No. 1. Nov., iii+58 pp.\*  
No. 2. Dec., iii+59-206 pp.\*  
No. 3. Feb., iii+207-282 pp.\*  
No. 4. May, iii+283-346 pp.\*  
No. 5. Sept., iii+347-405 pp.\* [Title page and table of contents for  
volume 6 issued with this number, vii pp.]
- 7 V. 7. Periodical bulletin, September, 1894, to July, 1895. [Nos. 1-5.]  
No. 1. Sept., iii+54 pp.  
No. 2. Oct., iii+55-215 pp.\*  
No. 3. Dec., iii+217-280 pp.\*  
No. 4. Mar., iii+281-360 pp.\*  
No. 5. July, iii+361-448 pp.\* [Title page and table of contents for  
vol. 7 issued with this number, v pp.]
- 8 [V. 8] General index to the seven volumes of Insect Life, 1888-1895.  
1897. 145 pp.  
[Discontinued. The class of matter formerly used in this series is continued in Bulle-  
tins, new series (A9.6:) and Technical series (A9.8:)]

**A9.7<sup>a</sup>: Insect life (separates)**

[A few of the more important articles were issued separately in pamphlet form.  
References to all the articles will be found under their proper headings in the  
index to this work.]

**A9.8: Technical series**

- 1 No. 1. Revision of Aphelininae of North America, a subfamily of hymen-  
opterous parasites of family Chalcididae; by L. O. Howard. 1895.  
44 pp.
- 2 No. 2. Grass and grain joint-worm flies and their allies, a consideration  
of some North American phytophagic Eurytominae; by L. O.  
Howard. 1896. 24 pp.
- 3 No. 3. Revision of Nematinae of North America, a subfamily of leaf-feed-  
ing hymenoptera of family Tenthredinidae; by C. L. Marlatt.  
1896. 135 pp. 1 pl.
- 4 No. 4. Some Mexican and Japanese injurious insects liable to be intro-  
duced into United States. 1896. 56 pp.
- 5 No. 5. Study in insect parasitism, consideration of parasites of white-  
marked tussock moth, with account of their habits, and interrela-  
tions, with descriptions of new species; by L. O. Howard. 1897.  
57 pp.
- 6 No. 6. San Jose scale and its nearest allies; by T. D. A. Cockerell. 1897.  
31 pp.
- 7 No. 7. Revision of Tachinidae of America north of Mexico, a family of  
parasitic two-winged insects; by D. W. Coquillett. 1897. 154+  
149-156 pp.  
[Corrected index issued Dec. 1897.]
- 8 No. 8. Contributions toward a monograph of the American Aleurodidae,  
by A. L. Quaintance; Red spiders of U. S. (Tetranychus and Stig-  
mæus), by Nathan Banks. 1900. 79 pp. 8 pl.
- 9 No. 9. Life history of two species of plant-lice inhabiting both witch-hazel  
and birch; by Theo. Pergande. 1901. 44 pp.

**A10. EXPERIMENT STATIONS OFFICE**

[For historical sketch of Office, see Yearbook, 1897 (A1.10:897), p. 135.]

**A10.1<sup>1</sup>: Annual reports of Director (to Secretary of Agriculture)**

- 1888 (Atwater). (In A1.1:888, p. 537.)
- 889 1889 (Atwater), [1]+485-544+iv pp. (Also in A1.1:889, p. 485.)
- 890 1890 (Atwater), [1]+489-555+iii pp. (Also in A1.1:890, p. 489.)

\*The unbound serial numbers of these issues could not be found. As bound in the volumes the  
lettered pages are omitted, and could not therefore be verified.



## Tables

Classifica-  
tion no.

### A10. EXPERIMENT STATIONS OFFICE—Continued

#### A10.1<sup>1</sup>: Annual reports of Director (to Secretary of Agriculture)—Continued.

891	1891 (Harris), [1]+503-538+ii pp. Map. (Also in A1.1:891, p. 503.)
892	1892 (Harris), iii+515-549+iii pp. (Also in A1.1:892, p. 515.)
893	1893 (True), iv+417-464+ii pp. (Also in A1.1:893, p. 417.)
894	1894 (True), iii+123-131 pp. (Also in A1.1:894, p. 123.)
895	1895 (True), iii+131-143 pp. (Also in A1.1:895, p. 131.)
896	1896 (True), iii+123-143 pp. (Also in A1.1:896, p. 123.)
897	1897 (True), iii+117-139 pp. (Also in A1.1:897, p. 117.)
898	1898 (True), iii+103-126 pp. (Also in A1.1:898, p. 103.)
899	1899 (True), iii+119-153 pp. (Also in A1.1:899, p. 119.)
900	1900 (True), ii+165-210 pp. (Also in A1.1:900, p. 165.)
901	1901 (True), iii+175-233 pp. (Also in A1.1:901, p. 175.)
902	1902 (True), iii+241-304 pp. (Also in A1.1:902, p. 241.)

#### A10.1<sup>2</sup>: Annual reports of Office of Experiment Stations (to Congress)

[By provision of the act establishing experiment stations in connection with the agricultural colleges in the various states and territories, approved Mar. 2, 1887, the stations were required to send to the governors of their respective states or territories, for transmission to the Secretary of Agriculture, on or before February 1st of each year, a statement of their receipts and expenditures, with an outline of the work accomplished.

It was not, however, until the approval of the Agricultural appropriation act of Aug. 8, 1894, that provision was made for sending to Congress an annual report based upon these returns. The report for the fiscal year 1895, the one called for in the act, was laid before the Senate Apr. 7, 1896, and referred to the Committee on Printing, who reported a concurrent resolution providing for its publication as a document, with 2,000 additional copies for the use of the Agriculture Department. The resolution passed the Senate but did not receive the sanction of the House, and the report therefore was never printed.

The second report, 1896, called for by Congress, was printed as S. doc. 137, 54th Cong., 2d sess.; serial no. 3470.

The third report, 1897, was printed as H. doc. 205, 55th Cong., 2d sess.; serial no. 3667, and also as Bulletin no. 50, Experiment Stations Office.

The fourth report, 1898, was printed as H. doc. 121, 55th Cong., 3d sess.; serial no. 3768, and also as Bulletin no. 61, Experiment Stations Office.

The fifth report, 1899, was printed as H. doc. 500, 56th Cong., 1st sess.; serial no. 3929, and also as Bulletin no. 83, Experiment Stations Office.

The sixth report, 1900, was printed as H. doc. 336, 56th Cong., 2d sess.; serial no. 4116, and also as Bulletin no. 93, Experiment Stations Office.

The seventh report, 1901, the first to be published as an "annual report of the Office of Experiment Stations," was also printed as H. doc. 834, 57th Cong., 1st sess.; serial no. 4301.

Future reports will be issued in conformity with this latter method and will include, besides the receipts and expenditures, reports of the Alaska, Hawaii, and Porto Rico Experiment Stations, which are under the direct supervision of the Office; reports on Investigations on irrigation and on the nutrition of man, and on Agricultural Education and the Farmers' Institutes.]

901	1901 (True), 489 pp. 41 pl. Same, 57th Cong., 1st sess., H. doc. 334; serial no. 4301.
-----	---

#### A10.2: General publications

[Publications which originated in this Office, but which were published in a numbered series of the Secretary's Office or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the Index to this work. Publications of this Office issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

Ab2	Abbreviations used in Experiment Station Record. n. t. p. n. d. 16 pp.
C18	Card index of agricultural literature. Terms of sale of card index of agricultural literature. n. d. n. t. p. [3] pp.
C43 <sup>1</sup>	[Chicago, Ill., World's Columbian Exposition, Collective College and Station exhibit.] n. t. p. May 12, 1892. [4] pp. 4°
C43 <sup>2</sup>	Same. Address by advisory board. Nov. 19, 1892. (Circ.)
C43 <sup>3</sup>	Same. [Letter to accompany address.] Nov. 23, 1892. (Circ.)
C43 <sup>4</sup>	Same. Extract from annual address of New Orleans convention. Nov., 1892. (Circ.)
F73 <sup>1</sup>	Food and nutrition of man. List of publications on food and nutrition of man. [May, 1898.] n. t. p. 4 pp.
F73 <sup>2</sup>	Same, rev. [July, 1898.] n. t. p. 4 pp.

Classifica-  
tion no.**A10. EXPERIMENT STATIONS OFFICE—Continued****A10.2: General publications—Continued**

- F73<sup>3</sup> Food and nutrition of man. List of publications on food and nutrition of man, rev. [July, 1899.] n. t. p. 5 pp.
- F73<sup>4</sup> Same, rev. [Mar. 1900.] n. t. p. 6 pp.
- F73<sup>5</sup> Same, rev. [Dec. 1900.] n. t. p. 7 pp.
- F73<sup>6</sup> Same, rev. [Oct. 1901.] n. t. p. 8 pp.
- F73<sup>7</sup> Same, rev. Nov. 5, 1902. n. t. p. 9 pp.
- In2 Index to "Experiment Station Work." [Announcement regarding.] May 7, 1898. (Circ.)
- Ir7<sup>1</sup> Irrigation. List of publications of Office on Irrigation. n. t. p. n. d. 2 pp.
- Ir7<sup>2</sup> Same, rev. [1901.] n. t. p. 4 pp.
- Ir7<sup>3</sup> Same, rev. [1901.] n. t. p. 5 pp.
- Ir7<sup>4</sup> Same, rev. Oct. 15, 1902. n. t. p. 7 pp.
- P83 Porto Rico. Message from President of U. S., transmitting report on investigations of agricultural resources and capabilities of Porto Rico, with special reference to establishment of an agricultural experiment station in that island, [by Seaman A. Knapp.] 1901. 32 pp. 7 pl.
- Same, 56th Cong., 2d sess., H. doc. 171; serial no. 4117.
- St2 Station publications. List of Station publications lacking in library of office of Experiment Stations. Nov. 1, 1892. n. t. p. 4 pp.

**A10.3: Bulletins**

- 1 No. 1. Organization of Agricultural Experiment Stations in U. S. 1889. 82 pp.
  - 2<sup>1</sup> No. 2. Digest of annual reports of Experiment Stations in U. S., 1888, pt. 1. 1889. 258 pp.
  - 2<sup>2</sup> Same, pt. 2. 1891. 173 pp.
  - 3 No. 3. Report of meeting of horticulturists of Agricultural Experiment Stations, at Columbus, Ohio, June 13, 14, 1889; by A. W. Harris. 1889. 12 pp.
  - 4 No. 4. List of horticulturists of Agricultural Experiment Stations in U. S., with outline of work in horticulture at the several stations; by W. B. Alwood. 1889. 27 pp.
  - 5 No. 5. Organization lists of Agricultural Experiment Stations and agricultural schools and colleges in U. S. 1890. 67 pp.
  - 6 No. 6. List of botanists of Agricultural Experiment Stations in U. S., with outline of work in botany at the several stations. 1890. 23 pp.
  - 7 No. 7. Proceedings of 5th annual convention Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., Aug. 12-18, 1891; edited by A. W. Harris and H. E. Alvord. 1892. 113 pp.
  - 8 No. 8. Six lectures on investigations at Rothamsted Experimental Station, delivered under provisions of Lawes Agricultural trust by Robt. Warington, before Association of American Agricultural Colleges and Experiment Stations at Washington, D. C., Aug. 12-18, 1891. 1892. 113 pp. 11 pl.
  - 9 No. 9. Fermentations of milk; by H. W. Conn. 1892. 75 pp.
  - 10 No. 10. Meteorological work for agricultural institutions; [by] Mark W. Harrington. 1892. 23 pp.
  - 11 No. 11. Compilation of analyses of American feeding stuffs; by E. H. Jenkins and A. L. Winton. 1892. 155 pp.
  - 12 No. 12. Organization lists of Agricultural Experiment Stations and agricultural schools and colleges in U. S. 1892. 78 pp.
  - 13 No. 13. Organization lists of Agricultural Experiment Stations and agricultural schools and colleges in U. S. 1893. 123 pp.
  - 14 No. 14. Proceedings of convention of National League for Good Roads, held at Washington, D. C., Jan. 17, 18, 1893, and hearing by Committee on Agriculture of House of Representatives January 19, 1893. 1893. 101 pp.
  - 15 No. 15. Handbook of experiment station work; a popular digest of publications of the agricultural experiment stations in U. S. 1893. 411 pp.
- Same, 54th Cong., 1st sess., H. doc. 361; serial no. 3435.

# Tables

Classifica-  
tion no.

## A10. EXPERIMENT STATIONS OFFICE—Continued

### A10.3: Bulletins—Continued

- 16 No. 16. Proceedings 6th annual convention of Association of American Agricultural Colleges and Experiment Stations, New Orleans, La., Nov. 15-19, 1892; edited by A. W. Harris and H. E. Alvord. 1893. 176 pp.
- 17 No. 17. Suggestions for establishment of food laboratories in connection with agricultural experiment stations of U. S.; [by Edward Atkinson]. 1893. 20 pp.
- 18 No. 18. Contribution to investigation of assimilation of free atmospheric nitrogen by white and black mustard; by J. P. Lotsy. 1894. 19 pp.
- 19 No. 19. Organization lists of agricultural experiment stations and agricultural schools and colleges in U. S. 1894. 99 pp.
- 20 No. 20. Proceedings of 7th annual convention of Association of American Agricultural Colleges and Experiment Stations, Chicago, Ill., Oct. 17-19, 1893; edited by A. C. True and H. E. Alvord. 1894. 100 pp.
- 21 No. 21. Methods and results of investigations on chemistry and economy of food; by W. O. Atwater. 1895. 222 pp.
- 22 No. 22. Agricultural investigations at Rothamsted, England, during 50 years; six lectures delivered under provisions of Lawes agricultural trust; by Sir Joseph Henry Gilbert. 1895. 316 pp. 3 pl.
- 23 No. 23. Organization lists of agricultural experiment stations and institutions with courses in agriculture in U. S. 1895. 88 pp.
- 24 No. 24. Proceedings 8th annual convention of Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., Nov. 13-15, 1894; edited by A. C. True and H. H. Goodell. 1895. 98 pp.
- 25 No. 25. Dairy bacteriology; by H. W. Conn. 1895. 40 pp.
- 26 No. 26. Agricultural experiment stations, their objects and work; by A. C. True. 1895. 16 pp.
- 27 No. 27. Organization lists of agricultural experiment stations and institution having courses in agriculture in U. S. 1896. 93 pp.
- 28<sup>1</sup> No. 28. Chemical composition of American food materials; by W. O. Atwater and Chas. D. Woods. 1896. 47 pp.
- 28<sup>2</sup> Same, rev. ed.; by W. O. Atwater and A. P. Bryant. 1899. 87 pp.
- 29 No. 29. Dietary studies at University of Tennessee in 1895; by Chas. E. Wait, with comments by W. O. Atwater and Chas. D. Woods. 1896. 45 pp.
- 30 No. 30. Proceedings of 9th annual convention of Association of American Agricultural Colleges and Experiment Stations, Denver, Colo., July 16-18, 1895; edited by A. C. True and H. H. Goodell. 1896. 100 pp.
- 31 No. 31. Dietary studies at University of Missouri in 1895 and data relating to bread and meat consumption in Missouri; by H. B. Gibson, S. Calvert, and D. W. May, with comments by W. O. Atwater and Chas. D. Woods. 1896. 24 pp.
- 32 No. 32. Dietary studies at Purdue University, Lafayette, Ind., in 1895; by Winthrop E. Stone, with comments by W. O. Atwater and Chas. D. Woods. 1896. 28 pp.
- 33 No. 33. Cotton plant: its history, botany, chemistry, culture, enemies, and uses; [Report] with introduction by Charles W. Dabney. 1896. 433 pp. 1 l. 4 pl.  
Same, 54th Cong., 2d sess., H. doc. 267; serial no. 3536.  
*See also* A1.9:47 and A1.9:48.
- 34 No. 34. Carbohydrates of wheat, maize, flour, and bread, and action of enzymic ferments upon starches of different origin; by Winthrop E. Stone. 1896. 44 pp.  
[Withdrawn Jan., 1898; reissued Jan., 1899; again withdrawn June 24, 1899.]
- 35 No. 35. Food and nutrition investigations in New Jersey in 1895 and 1896; by Edward B. Voorhees. 1896. 40 pp.
- 36 No. 36. Notes on irrigation in Connecticut and New Jersey; by C. S. Phelps and Edward B. Voorhees. 1897. 64 pp.
- 37 No. 37. Dietary studies at Maine State College in 1895; by Whitman H. Jordan. 1897. 57 pp.

Classification  
no.

**A10. EXPERIMENT STATIONS OFFICE—Continued**

**A10.3: Bulletins—Continued**

- 38 No. 38. Dietary studies with reference to food of negro in Alabama, in 1895 and 1896, conducted with cooperation of Tuskegee Normal and Industrial Institute and the Agricultural and Mechanical College of Alabama; reported by W. O. Atwater and Chas. D. Woods. 1897. 69 pp. 2 pl.
- 39 No. 39. Organization lists of agricultural experiment stations and institutions with courses in agriculture in U. S. 1897. 96 pp.
- 40<sup>1</sup> No. 40. Dietary studies in New Mexico in 1895; by Arthur Goss. 1897. 23 pp.
- 40<sup>2</sup> Same. 1899. 23 pp.
- 41 No. 41. Proceedings of 10th annual convention of Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., Nov. 10-12, 1896; edited by A. C. True and H. H. Goodell. 1897. 120 pp.
- 42 No. 42. Cotton culture in Egypt; by George P. Foaden. 1897. 34 pp.
- 43 No. 43. Losses in boiling vegetables and composition and digestibility of potatoes and eggs; [articles] by H. Snyder and Almah J. Frisby and A. P. Bryant. 1897. 31 pp.
- 44 No. 44. Report of preliminary investigations on metabolism of nitrogen and carbon in human organism, with respiration calorimeter of special construction; by W. O. Atwater, C. D. Woods, and F. G. Benedict. 1897. 64 pp.
- 45<sup>1</sup> No. 45. Digest of metabolism experiments in which the balance of income and outgo was determined; by W. O. Atwater and C. F. Langworthy. 1897. 434 pp.
- 45<sup>2</sup> Same, rev. ed. 1898. 434 pp.
- 46 No. 46. Dietary studies in New York City in 1895 and 1896; by W. O. Atwater and Chas. D. Woods. 1898. 117 pp.
- 47 No. 47. Organization lists of agricultural experiment stations and institutions with courses in agriculture in U. S. 1898. 96 pp.
- 48 No. 48. Report to Congress on agriculture in Alaska, including reports by Walter H. Evans, Benton Killin, and Sheldon Jackson. 1898. iv + 36 pp. 23 pl.  
Same, 55th Cong., 2d sess., H. doc. 160; serial no. 3667.
- 49 No. 49. Proceedings of 11th annual convention of Association of American Agricultural Colleges and Experiment Stations, Minneapolis, July 13-15, 1897; edited by A. C. True and H. H. Goodell. 1898. 100 pp.
- 50 No. 50. Work and expenditures of agricultural experiment stations for 1897; by A. C. True. 1898. vi + 97 pp. 6 pl.  
Same, 55th Cong., 2d sess., H. doc. 205; serial no. 3667.
- 51 No. 51. Statistics of land-grant colleges and agricultural experiment stations in U. S. for year ending June 30, 1897. [Compiled by Miss S. L. Sommers.] 1898. 39 pp.
- 52 No. 52. Nutrition investigations in Pittsburg, Pa., 1894-96; by Isabel Bevier. 1898. 48 pp.
- 53 No. 53. Nutrition investigations at University of Tennessee in 1896 and 1897; by Chas. E. Wait. 1898. 46 pp.
- 54 No. 54. Nutrition investigations in New Mexico in 1897; by Arthur Goss. 1898. 20 pp. 1 pl.
- 55 No. 55. Dietary studies in Chicago, 1895 and 1896, conducted with cooperation of Jane Addams and Caroline L. Hunt, of Hull House; reported by W. O. Atwater and A. P. Bryant. 1898. 76 pp.
- 56 No. 56. History and present status of instruction in cooking in public schools of New York City, 1899; reported by (Mrs.) Louise E. Hogan, with introduction by A. C. True. 1899. 70 pp. 12 pl.  
[Withdrawn.]
- 57 No. 57. Varieties of corn; by E. L. Sturtevant. 1899. 108 pp.
- 58 No. 58. Water rights on Missouri River and tributaries, by Elwood Mead; with papers on water laws of Colorado, by John E. Field, and of Nebraska, by J. M. Wilson. 1899. 80 pp. 3 pl.
- 59 No. 59. Organization lists of agricultural colleges and experiment stations in U. S., with list of agricultural experiment stations in foreign countries. 1899. 15 pp.

## Tables

Classifica-  
tion no.

## A10. EXPERIMENT STATIONS OFFICE—Continued

### A10.3: Bulletins—Continued

- 60 No. 60. Abstract of laws for acquiring titles to water from Missouri River and tributaries, with legal forms in use; compiled by Elwood Mead. 1899. 77 pp.
- 61 No. 61. Report of work and expenditures of agricultural experiment stations for year ended June 30, 1898; by A. C. True. 1899. vi+113 pp. 14 pl.  
Same, 55th Cong., 3d sess., H. doc. 121; serial no. 3768.
- 62 No. 62. Second report to Congress on agriculture in Alaska, including reports; by C. C. Georgeson and Walter H. Evans. 1899. vii+51 pp. 12 pl.  
Same, 55th Cong., 3d sess., H. doc. 169; serial no. 3768.
- 63 No. 63. Description of a new respiration calorimeter and experiments on conservation of energy in human body; by W. O. Atwater and E. B. Rosa. 1899. 94 pp. 8 pl. (Slip of corrections for page 86.)
- 64 No. 64. Statistics of land-grant colleges and experiment stations in U. S. for year ending June 30, 1898; [compiled by Miss S. L. Sommers]. 1899. 39 pp.
- 65 No. 65. Proceedings of 12th annual convention of Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., Nov. 15-17, 1898; edited by A. C. True, W. H. Beal, and H. H. Goodell. 1899. 138 pp.
- 66 No. 66. Physiological effect of creatin and creatinin, and their value as nutrients; by J. W. Mallet. 1899. 24 pp.
- 67 No. 67. Studies on bread and bread making; [articles] by Harry Snyder and L. A. Voorhees. 1899. 51 pp. 2 pl.
- 68 No. 68. Description of some Chinese vegetable food materials and their nutritive and economic value; by Walter C. Blasdale. 1899. 48 pp. 8 pl.
- 69<sup>1</sup> No. 69. Experiments on metabolism of matter and energy in human body; by W. O. Atwater and F. G. Benedict, with collaboration of A. W. Smith and A. P. Bryant. 1899. 112 pp.
- 69<sup>2</sup> Same, revised edition. 1899. 112 pp.
- 70 No. 70. Water-right problems of Bear River; [articles] by Clarence T. Johnston and Joseph A. Breckons. 1899. 40 pp. 9 pl.
- 71 No. 71. Dietary studies of negroes in eastern Virginia in 1897 and 1898; [articles] by H. B. Frissell and Isabel Bevier. 1899. 45 pp. 3 pl.
- 72 No. 72. Farmers' reading courses; by L. H. Bailey. 1899. 36 pp.
- 73 No. 73. Irrigation in Rocky Mountain States; by J. C. Ulrich. 1899. 64 pp. 10 pl.
- 74 No. 74. Organization lists of agricultural colleges and experiment stations in U. S., with list of agricultural experiment stations in foreign countries. 1900. 121 pp.
- 75 No. 75. Dietary studies of university boat crews; by W. O. Atwater and A. P. Bryant. 1900. 72 pp.
- 76 No. 76. Proceedings of 13th annual convention of Association of American Agricultural Colleges and Experiment Stations, San Francisco, Cal., July 5-7, 1899; edited by A. C. True, W. H. Beal, and H. H. Goodell. 1900. 112 pp.
- 77 No. 77. Digestibility of American feeding stuffs; by Whitman H. Jordan and Frank H. Hall. 1900. 100 pp.
- 78 No. 78. Statistics of land-grant colleges and agricultural experiment stations, 1899 [compiled by Miss J. A. Davis]. 1900. 39 pp.
- 79 No. 79. Farmers' institutes, history and status in U. S. and Canada; by L. H. Bailey. 1900. 34 pp.
- 80 No. 80. [History and present status of] Agricultural experiment stations in U. S.; by A. C. True and V. A. Clark. Paris Exposition, 1900, prepared to accompany experiment station exhibit. 1900. 636 pp. 153 pl. map.  
Same, 56th Cong., 2d sess., H. doc. 507; serial no. 4170.
- 81 No. 81. Use of water in irrigation in Wyoming and its relation to ownership and distribution of natural supply; by B. C. Buffum. 1900. 56 pp. 8 pl.



Classification  
no.

**A10. EXPERIMENT STATIONS OFFICE—Continued**

**A10.3: Bulletins—Continued**

- 82 No. 82. Agricultural investigations in Alaska, 1899; by C. C. Georgeson. 1900. 55 pp. 17 pl.  
Same, 56th Cong., 1st sess., H. doc. 314; serial no. 3929.
- 83 No. 83. Work and expenditures of agricultural experiment stations for year ended June 30, 1899; by A. C. True. 1900. vi+111 pp.  
Same, 56th Cong., 1st sess., H. doc. 500; serial no. 3929.
- 84 No. 84. Nutrition investigations at California agricultural experiment station, 1896-1898; by M. E. Jaffa. 1900. 39 pp.
- 85 No. 85. Investigations on digestibility and nutritive value of bread; by Chas. D. Woods and L. H. Merrill. 1900. 51 pp.
- 86 No. 86. Use of water in irrigation; report of investigations made in 1899 under supervision of Elwood Mead and C. T. Johnston, including reports by special agents and observers W. M. Reed, W. H. Code, W. Irving, O. V. P. Stout, Thomas Berry, S. Fortier, R. C. Gemmell, G. L. Swendsen, and D. W. Ross. 1900. 253 pp. 50 pl.  
Same, 56th Cong., 2d sess., H. doc. 466; serial no. 4117.
- 87 No. 87. Irrigation in New Jersey; by Edward B. Voorhees. 1900. 40 pp.
- 88 No. 88. Organization lists of agricultural colleges and experiment stations in U. S., with list of agricultural experiment stations in foreign countries. 1901. 134 pp.
- 89 No. 89. Experiments on effect of muscular work upon digestibility of food and metabolism of nitrogen, conducted at University of Tennessee, 1897 to 1899; by Chas. E. Wait. 1901. 77 pp.
- 90 No. 90. Irrigation in Hawaii; by Walter Maxwell. 1900. 48 pp. 6 pl.
- 91 No. 91. Nutrition investigations at University of Illinois, North Dakota Agricultural College, and Lake Erie College, Ohio, 1896-1900; by H. S. Grindley, J. L. Sammis, E. F. Ladd, Isabel Bevier, and Elizabeth C. Sprague. 1900. 42 pp.
- 92 No. 92. Reservoir system of Cache la Poudre Valley; by E. S. Nettleton. 1901. 48 pp. 14 pl.
- 93 No. 93. Work and expenditures of agricultural experiment stations for year ended June 30, 1900; by A. C. True. 1901. 181 pp. 8 pl.  
Same, 56th Cong., 2d sess., H. doc. 336; serial no. 4116.
- 94 No. 94. Fourth report on agricultural investigations in Alaska, 1900; by C. C. Georgeson. 1901. 83 pp. 24 pl.  
Same, 56th Cong., 2d sess., H. doc. 335; serial no. 4117.
- 95 No. 95. Report on agricultural resources and capabilities of Hawaii; by Wm. C. Stubbs. 1901. 100 pp. 28 pl.  
Same, 56th Cong., 2d sess., H. doc. 368; serial no. 4117.
- 96 No. 96. Irrigation laws of northwest territories of Canada, and of Wyoming, with discussions by J. S. Dennis, Fred Bond, and J. M. Wilson. 1901. 90 pp. 6 pl.
- 97 No. 97. Statistics of land-grant colleges and agricultural experiment stations in U. S., for year ended June 30, 1900 [compiled by Miss Marie T. Spethmann]. 1901. 37 pp.
- 98 No. 98. Effect of severe and prolonged muscular work on food consumption, digestion, and metabolism, by W. O. Atwater and H. C. Sherman; and Mechanical work and efficiency of bicyclers, by R. C. Carpenter. 1901. 67 pp.
- 99 No. 99. Proceedings of 14th annual convention of Association of American Agricultural Colleges and Experiment Stations, Nov. 13-15, 1900; edited by A. C. True, W. H. Beal, and H. H. Goodell. 1901. 192 pp. 3 pl.
- 100 No. 100. Report of irrigation investigations in California under direction of Elwood Mead, assisted by William E. Smythe, Marsden Manson, J. M. Wilson, Charles D. Marx, Frank Soule, C. E. Grunsky, Edward M. Boggs, and James D. Schuyler. 1901. 411 pp. 29 pl. 4°  
Same, 57th Cong. 1st sess., S. doc. 356; serial no. 4246.  
[Preliminary report, 73 pp., transmitted to Congress, Jan. 24, 1901. (56-2, S. doc. 108; serial no. 4033.)]

**Tables**Classification  
no.**A10. EXPERIMENT STATIONS OFFICE—Continued****A10.3: Bulletins—Continued**

- |     |   |
|-----|---|
| 101 | No. 101. Studies on bread and bread making at University of Minnesota, 1899 and 1900; by Harry Snyder. 1901. 65 pp. 3 pl.   |
| 102 | No. 102. Experiments on losses in cooking meat, 1898-1900; by H. S. Grindley, with cooperation of H. McCormack and H. C. Porter. 1901. 64 pp.   |
| 103 | No. 103. Evolution of reaping machines; by Merritt Finley Miller. 1902. 43 pp. 9 pl.  |
| 104 | No. 104. Report of irrigation investigations for 1900; under supervision of Elwood Mead, including reports by special agents and observers W. M. Reed, W. H. Code, A. J. McClatchie, W. Irving, J. M. Wilson, R. C. Gemmell, G. L. Swendsen, O. V. P. Stout, W. H. Fairfield, D. W. Ross, O. L. Waller, S. Fortier, and J. C. Nagle. 1902. 334 pp. 25 pl. 3 maps. |
| 105 | No. 105. Irrigation in U. S.; testimony of Elwood Mead before Industrial Commission, June 11 and 12, 1901. Reprinted from report of U. S. Industrial Commission on agriculture and agricultural labor. 1901. 47 pp. 12 pl.  |
| 106 | No. 106. Results of investigations on Rothamsted soils, being lectures delivered under provisions of Lawes agricultural trust, by Bernard Dyer, before Association of American Agricultural Colleges and Experiment Stations at New Haven and Middletown, Conn., Nov., 1900. 1902. 180 pp.  |
| 107 | No. 107. Nutrition investigations among fruitarians and Chinese at California Agricultural Experiment Station, 1899-1901; by M. E. Jaffa. 1901. 43 pp. 1 pl.  |
| 108 | No. 108. Irrigation practice among fruit growers on Pacific coast; by E. J. Wickson. 1902. 54 pp. 10 pl.  |
| 109 | No. 109. Experiments on metabolism of matter and energy in human body, 1898-1900; by W. O. Atwater and F. G. Benedict, with cooperation of A. P. Bryant, A. W. Smith, and J. F. Snell. 1902. 147 pp.  |
| 110 | No. 110. Proceedings of 6th annual meeting of American Association of Farmers' Institute Workers, Buffalo, Sept. 18 and 19, 1901; edited by A. C. True, D. J. Crosby, and G. C. Creelman. 1902. 55 pp.  |
| 111 | No. 111. Organization lists of agricultural colleges and experiment stations in U. S., with list of agricultural experiment stations in foreign countries. 1902. 130 pp.  |
| 112 | No. 112. Agricultural experiment stations in foreign countries; by A. C. True and D. J. Crosby. 1902. 230 pp.   |
| 113 | No. 113. Irrigation of rice in U. S.; [articles] by Frank Bond and George H. Keeney. 1902. 77 pp. 29 pl.  |
| 114 | No. 114. Statistics of land-grant colleges and agricultural experiment stations in U. S. for year ended June 30, 1901 [compiled by Miss Marie T. Spethmann]. 1902. 39 pp.   |
| 115 | No. 115. Proceedings of 15th annual convention of Association of American Agricultural Colleges and Experiment Stations, held at Washington, D. C., Nov. 12-14, 1901; edited by A. C. True, W. H. Beal, and H. H. Goodell. 1902. 134 pp.  |
| 116 | No. 116. Dietary studies in New York City in 1896 and 1897; by W. O. Atwater and A. P. Bryant. 1902. 83 pp.   |
| 117 | No. 117. Experiments on effect of muscular work upon digestibility of food and metabolism of nitrogen, conducted at University of Tennessee, 1899-1900; by Chas. E. Wait. 1902. 43 pp.  |
| 118 | No. 118. Irrigation from Big Thompson River; by John E. Field. 1902. 75 pp. 6 pl.   |
| 119 | No. 119. Report of irrigation investigations for 1901, containing Summary of results, by R. P. Teetle, and Reports by W. M. Reed, W. H. Code, A. J. McClatchie, E. W. Hilgard, W. Irving, A. E. Chandler, O. L. Waller, D. W. Ross, Samuel Fortier, A. P. Stover, O. V. P. Stout, H. J. Waters, F. H. King, E. B. Voorhees, and J. C. Nagle. 1902. 401 pp. 64 pl. |

Classification.  
no

**A10. EXPERIMENT STATIONS OFFICE—Continued**

**A10.3: Bulletins—Continued**

- 120 No. 120. Proceedings of 7th annual meeting of American Association of Farmers' Institute Workers, held at Washington, D. C., June 24–26, 1902; edited by A. C. True, D. J. Crosby, and G. C. Creelman. 1902. 119 pp.
- 121 No. 121. Experiments on metabolism of nitrogen, sulphur, and phosphorus in the human organism; by H. C. Sherman. Conducted in cooperation with Columbia University. 1902. 47 pp.

**A10 3<sup>a</sup>: Bulletins (separates)**

[A few of the more important articles contained in the Bulletins were issued separately in pamphlet form. References to all the articles will be found under their proper headings in the index to this work].

**A10.4: Circulars**

- ✓ 1 No. 1. List of agricultural experiment stations in U. S., with addresses. Feb. 1, 1889. n. p. n. d. 7 pp.
- ✓ 2 No. 2. [In regard to meeting of those interested in use of fertilizers. Jan. 31, 1889. n. t. p. [3] pp.
- ✓ 3 No. 3. [Extract from proceedings of Knoxville Convention.] Feb. 6, 1889. n. t. p. [3] pp.
- ✓ 4 No. 4. Memorandum for station reports. Feb. 12, 1889. n. p. n. d. 4 pp.
- ✓ 5 No. 5. [Call for meeting of experiment stations for discussion.] Feb. 25, 1889. (Circ.)
- ✓ 6 No. 6. List of originators of fruits, vegetables, etc., in U. S., with addresses and names of specialists. Mar. 8, 1889. 7 l. f°  
[Mimeographed; never printed.]
- 7 No. 7. Cooperative field experiments with fertilizers. Mar., 1889. n. p. n. d. 39 pp.
- ✓ 8 No. 8. Explanations and directions for soil tests with fertilizers. Mar. 1889. n. p. n. d. 11 pp.
- ✓ 9 No. 9. Memorandum for report on farmers' institutes in United States. n. d. 4 l. blank.
- ✓ 10 No. 10. [Horticulturists' circular, schedule of questions. List of horticulturists and botanists of Experiment Stations in U. S.] June 27, 1889. 7 l. f°  
[Mimeographed; never printed.]
- ✓ 11 No. 11. Rules for naming vegetables. Report of Committee of Experiment-Station Horticulturists. Sept., 1889. n. p. n. d. [3] pp.
- ✓ 12 No. 12. Regarding library and publications of Office of Experiment Stations. July, 1889. 3 pp. n. p. n. d. (c. t. o.)
- ✓ 13 No. 13. [Calling attention to meeting of American agricultural colleges and experiment stations. Oct. 16, 1889. n. t. p. [3] pp.
- ✓ 14 No. 14. [Calling attention to meeting of official economic entomologists.] Oct. 28, 1889. n. t. p. [3] pp.
- ✓ 15 No. 15. Inquiries regarding investigations in botany at agricultural colleges and experiment stations. Jan., 1890. n. p. n. d. [4] pp.
- ✓ 16 No. 16. [Relating to publications of Office.] n. d. n. t. p. [3] pp.
- ✓ 17 No. 17. Letter to manufacturers of spray machinery. n. d. n. t. p. [3] pp.
- 18 No. 18. List of originators of fruits and vegetables in United States, with addresses and names of specialties. n. p. n. d. 12 pp.
- ✓ 19 No. 19. Experiments with fertilizers on fruits and vegetables, to study feeding capacities of plants and variations due to action of fertilizers. Mar., 1891. n. t. p. 4 pp.
- 20 No. 20. Organization list of agricultural experiment stations in U. S. June, 1891. n. p. n. d. 21 pp.
- ✓ 21 No. 21. Fifth annual convention of Association of American Agricultural Colleges and Experiment Stations; delegates and visitors registered. Aug. 13, 1891. n. p. n. d. [4] pp.
- ✓ 22 No. 22. [Letter relative to] subject index of literature of agricultural experiment stations and kindred institutions. Nov., 1891. n. t. p. [3] pp.



# Tables

Classification  
no.

## A10. EXPERIMENT STATIONS OFFICE—Continued

### A10.4: Circulars—Continued

- 23<sup>1</sup> No. 23. Key to subject index of literature of agricultural experiment stations, and kindred institutions. Dec., 1893. n. p. n. d. [3] pp. 12°.
- 23<sup>2</sup> Same, revised. Apr. 25, 1902. [3] pp. 8°.
- 24 No. 24. Address list of agricultural experiment stations. [Dec., 1893.] (Circ.)
- 25<sup>1</sup> No. 25. Report on canaigre. May 15, 1894. n. t. p. 4 pp.
- 25<sup>2</sup> Same, rev. Nov. 20, 1897. n. t. p. 4 pp.
- 26 No. 26. Address list of agricultural colleges and experiment stations. n. d. n. t. p. 4 pp.
- 27 No. 27. Statistics of agricultural colleges and experiment stations, 1894. May 16, 1895. n. t. p. 18 pp.
- 28<sup>1</sup> No. 28. Report on broom corn. Jan. 8, 1896. n. t. p. 4 pp.
- 28<sup>2</sup> Same, rev. Nov. 20, 1897. n. t. p. 4 pp.
- 28<sup>3</sup> Same, rev. Oct. 3, 1900. n. t. p. 4 pp.
- 29 No. 29. Work and expenditures of agricultural experiment stations. Mar. 10, 1896. 4 pp.  
[Also printed as appendix to Annual report of Director, 1896. See A10.1:396, p. 141; and also for other prints, see A10.3:59, p. 96, and A10.3:74, p. 101.]
- 30 No. 30. Permanent elements in experiment station work; by A. C. True. May 26, 1896. n. t. p. 4 pp.
- 31 No. 31. Some books on agriculture and agricultural science, published 1893-96; [compiled by F. H. Hall]. Nov. 2, 1896. n. t. p. 176 pp., interleaved.
- 32<sup>1</sup> No. 32. Report of committee on methods of teaching agriculture. Dec. 8, 1896. n. t. p. 20 pp.
- 32<sup>2</sup> Same, rev. Nov. 15, 1897. n. t. p. 20 pp. (Also in A10.3:41, p. 57.)
- 33 No. 33. Civil service [reform] in Department of Agriculture; by Charles W. Dabney, jr. Jan. 26, 1897. n. t. p. 10 pp.
- 34 No. 34. Rules and apparatus for seed testing. Feb. 17, 1897. n. t. p. 9 pp.
- 35 No. 35. Statistics of land-grant colleges and agricultural experiment stations, 1896. Apr. 1, 1897. n. t. p. 18 pp.
- 36 No. 36. Constitution of Association of American Agricultural Colleges and Experiment Stations. [1897.] n. t. p. 4 pp.
- 37<sup>1</sup> No. 37. Second report of committee on methods of teaching agriculture. July 24, 1897. n. t. p. 4 pp.
- 37<sup>2</sup> Same, rev. Nov. 15, 1897. n. t. p. 4 pp.
- 38 No. 38. Some books on agriculture and sciences related to agriculture; published 1896-98. July 1, 1898. 45 pp.
- 39 No. 39. Third report of committee on methods of teaching agriculture. Nov. 21, 1898. n. t. p. 7 pp.
- 40 No. 40. Land-grant and other colleges and national defense; by Charles W. Dabney, jr. n. d. n. t. p. 15 pp.
- 41 No. 41. Fourth report of committee on methods of teaching agriculture. Sept. 28, 1899. n. t. p. 7 pp.
- 42 No. 42. German common school with a garden; by C. B. Smith. Oct. 28, 1899. n. t. p. 7 pp.
- 43<sup>1</sup> No. 43. [Report on] Food; Nutrients; Food economy. Oct. 31, 1899. n. t. p. 6 pp.
- 43<sup>2</sup> Same, revised. June 20, 1900. n. t. p. 6 pp.
- 44<sup>1</sup> No. 44. Agriculture experiment stations in U. S.; [by A. C. True. June 8, 1900.] n. p. n. d. 8 pp.
- 44<sup>2</sup> Same, revised, 1901. 11 pp.
- 45 No. 45. Fifth report of Committee on methods of teaching agriculture. Jan. 5, 1901. n. t. p. 8 pp.
- 46 No. 46. Functions and uses of food; by C. F. Langworthy. Apr. 5, 1901. n. t. p. 10 pp.
- 47 No. 47. [Outline of general plan of] card index of experiment station literature; by A. C. True. Apr. 19, 1902. n. t. p. 2 pp.
- 48 No. 48. What the Department of Agriculture is doing for Irrigation; by Elwood Mead. Oct. 14, 1902. n. t. p. 4 p.
- 49 No. 49. Secondary courses in agriculture. Oct. 17, 1902. n. t. p. 10 pp.

Classification  
no.

**A10. EXPERIMENT STATIONS OFFICE—Continued**

**A10.5: Miscellaneous bulletins**

- 1 No. 1. Proceedings of 2d annual convention of Association of American Agricultural Colleges and Experiment Stations, Knoxville, Tenn. Jan. 1-3, 1889; edited by A. W. Harris and H. E. Alvord. 1889. 123 pp.
- 2 No. 2. Proceedings of 3d annual convention of Association of American Agricultural Colleges and Experiment Stations, Washington, D. C. Nov. 12-15, 1889; edited by A. W. Harris and H. E. Alvord. 1890. 142 pp.
- 3 No. 3. Proceedings of 4th annual convention of Association of American Agricultural Colleges and Experiment Stations, Champaign, Ill. Nov. 11-13, 1890; edited by A. W. Harris and H. E. Alvord. 1891. 156 pp.

[Series discontinued.]

**A10.6: Experiment station record**

[In the first three volumes of the Record the abstracts of the station reports were grouped by stations, arranged alphabetically by States. Beginning with Vol. 4, an arrangement by topics was adopted, each topic being edited by the department's expert in that line. The various topics usually treated in agricultural publications are all represented. With but few exceptions each number also contained a paper by some noted authority on a particular subject.]

- 1 V. 1. September, 1889-July, 1890. 1890. iii+358 pp.  
 No. 1. Sept., 1889, ix+56 pp.  
 No. 2. Nov., 1889, +57-115 pp.\*  
 No. 3. Jan., 1890, +117-174 pp.\*  
 No. 4. Mar., 1890, +175-243 pp.\*  
 No. 5. May, 1890, +245-307 pp.\*  
 No. 6. July, 1890, +309-358 pp.\* [Title-page and table of contents for vol. 1, issued with this number. iii pp.]
- 2 V. 2. August, 1890-July, 1891. 1891. xxxii+853 pp.  
 No. 1. Aug., 1890, iv+40 pp.  
 No. 2. Sept., 1890, +41-88 pp.\*  
 No. 3. Oct., 1890, iv+89-138 pp.  
 No. 4. Nov., 1890, v+139-184 pp.  
 No. 5. Dec., 1890, vi+185-264 pp.  
 No. 6. Jan., 1891, v+265-308 pp.  
 No. 7. Feb., 1891, vi+309-384 pp.  
 No. 8. Mar., 1891, vii+385-468 pp.  
 No. 9. Apr., 1891, +469-540 pp.\*  
 No. 10. May, 1891, vii+541-624 pp.  
 No. 11. June, 1891, vii+625-698 pp.  
 No. 12. July, 1891, vi+699-853 pp. [Title-page and table of contents for vol. 2, issued with this number. xxxii pp.]
- 3 V. 3. August, 1891-July, 1892. 1892. xxxviii+1059 pp.  
 No. 1. Aug., 1891, vi+72 pp.  
 No. 2. Sept., 1891, vi+73-138 pp.  
 No. 3. Oct., 1891, vi+139-206 pp.  
 No. 4. Nov., 1891, vi+207-274 pp.  
 No. 5. Dec., 1891, vii+275-364 pp.  
 No. 6. Jan., 1892, vii+365-438 pp.  
 No. 7. Feb., 1892, vi+439-506 pp.  
 No. 8. Mar., 1892, v+507-584 pp.  
 No. 9. Apr., 1892, vii+585-664 pp.  
 No. 10. May, 1892, vii+665-758 pp.  
 No. 11. June, 1892, vii+759-840 pp.  
 No. 12. July, 1892, vii+841-970 pp.  
 [No. 13.] Index. pp. 979-1059. [Title-page and table of contents for vol. 3, issued with this number. xxxviii pp.]

\*These early unbound numbers were not found, and in the bound volumes the preliminary lettered pages of contents, etc., have been eliminated. The pagination given is therefore not entirely complete.

# Tables

Classifica-  
tion no.

## A10. EXPERIMENT STATIONS OFFICE—Continued

### A10.6: Experiment station record—Continued

- 4 V. 4. August, 1892–July, 1893. 1893. xxx+1086 pp.  
 No. 1. Aug., 1892, vii+110 pp.  
 No. 2. Sept., 1892, vii+111–230 pp.  
 No. 3. Oct., 1892, vi+231–322 pp.  
 No. 4. Nov., 1892, vi+323–394 pp.  
 No. 5. Dec., 1892, v+395–454 pp.  
 No. 6. Jan., 1893, vi+455–524 pp. (Errata slip.)  
 No. 7. Feb., 1893, vi+525–624 pp.  
 No. 8. Mar., 1893, vi+625–700 pp.  
 No. 9. Apr., 1893, vii+701–790 pp.  
 No. 10. May, 1893, vii+791–878 pp.  
 No. 11. June, 1893, vii+879–994 pp.  
 No. 12. July, 1893, [1]+995–1086 pp. [Title-page and table of contents for vol. 4, issued with this number. xxx pp.]
- 5 V. 5. 1893–1894. 1895. xxxiv+1227 pp.  
 No. 1. 1893, viii+138 pp.  
 No. 2. 1893, viii+139–268 pp.  
 No. 3. 1893, vii+269–358 pp.  
 No. 4. 1894, vi+359–452 pp.  
 No. 5. 1894, vi+453–546 pp.  
 No. 6. 1894, viii+547–666 pp.  
 No. 7. 1894, vi+667–744 pp.  
 No. 8. 1894, vi+745–830 pp.  
 No. 9. 1894, vii+831–940 pp.  
 No. 10. 1894, vii+941–1040 pp.  
 No. 11. 1894, v+1041–1106 pp.  
 No. 12. 1894, pp. 1107–1227. (Cover title only.) [Title-page and table of contents for vol. 5, issued with this number. xxxiv pp.]
- 6 V. 6. 1894–1895. 1896. xii+1134 pp.  
 No. 1. 1894, vi+88 pp. (Cover title only.)  
 No. 2. 1894, vi+89–174 pp. (Cover title only.)  
 No. 3. 1894, v+175–254 pp. (Cover title only.)  
 No. 4. 1895, vi+255–348 pp. (Cover title only.)  
 No. 5. 1895, viii+349–488 pp. (Cover title only.)  
 No. 6. 1895, vii+489–584 pp. (Cover title only.)  
 No. 7. 1895, vi+585–678 pp. (Cover title only.)  
 No. 8. 1895, v+679–758 pp. (Cover title only.)  
 No. 9. 1895, vi+759–850 pp. (Cover title only.)  
 No. 10. 1895, vi+851–944 pp. (Cover title only.)  
 No. 11. 1895, vi+945–1032 pp. (Cover title only.)  
 No. 12. 1895, pp. 1033–1134. (Cover title only.) [Title-page and table of contents for vol. 6, issued with this number. xii pp.]
- 7 V. 7. 1895–1896. 1897. xii+1092 pp.  
 No. 1. 1895, v+74 pp. (Cover title only.)  
 No. 2. 1895, vii+75–166 pp. (Cover title only.)  
 No. 3. 1895, vi+167–260 pp. (Cover title only.)  
 No. 4. 1895, v+261–342 pp. (Cover title only.)  
 No. 5. 1896, v+343–434 pp. (Cover title only.)  
 No. 6. 1896, vi+435–534 pp. (Cover title only.)  
 No. 7. 1896, v+535–632 pp. (Cover title only.)  
 No. 8. 1896, v+633–722 pp. (Cover title only.)  
 No. 9. 1896, v+723–814 pp. (Cover title only.)  
 No. 10. 1896, vi+815–901 pp. (Cover title only.)  
 No. 11. 1896, vi+903–996 pp. (Cover title only.)  
 No. 12. 1896, pp. 997–1092. (Cover title only.) [Title-page and table of contents for vol. 7, issued with this number. xii pp.]
- 8 V. 8. 1896–1897. 1897. xiv+1128 pp.  
 No. 1. 1896, vi+94 pp. (Cover title only.)  
 No. 2. 1896, vii+95–176 pp. (Cover title only.)  
 No. 3. 1896, vi+177–268 pp. (Cover title only.)  
 No. 4. 1897, vii+269–354 pp. (Cover title only.)  
 No. 5. 1897, vi+355–444 pp. (Cover title only.)

Classifica-  
tion no.

**A10. EXPERIMENT STATIONS OFFICE—Continued**

**A10.6: Experiment station record—Continued**

- 8 V. 8. 1896-1897—Continued  
 No. 6. 1897, vi+445-538 pp. (Cover title only.)  
 No. 7. 1897, vi+539-638 pp. (Cover title only.)  
 No. 8. 1897, v+639-738 pp. (Cover title only.)  
 No. 9. 1897, vii+739-838 pp. (Cover title only.)  
 No. 10. 1897, v+839-938 pp. (Cover title only.)  
 No. 11. 1897, vi+939-1036 pp. (Cover title only.)  
 No. 12. 1897, pp. 1037-1128. (Cover title only.) [Title-page and  
 table of contents for vol. 8, issued with this number. xiv pp.]
- 9 V. 9. 1897-1898. 1898. xvi+1198 pp.  
 No. 1. 1897, iv+100 pp. (Cover title only.)  
 No. 2. 1897, vi+101-200 pp. (Cover title only.)  
 No. 3. 1897, vi+201-300 pp. (Cover title only.)  
 No. 4. 1897, vii+301-400 pp. (Cover title only.)  
 No. 5. 1898, v+401-500 pp. (Cover title only.)  
 No. 6. 1898, v+501-600 pp. (Cover title only.)  
 No. 7. 1898, vi+601-700 pp. (Cover title only.)  
 No. 8. 1898, vi+701-800 pp. (Cover title only.)  
 No. 9. 1898, vii+801-900 pp. (Cover title only.)  
 No. 10. 1898, v+901-1000 pp. (Cover title only.)  
 No. 11. 1898, v+1001-1100 pp. (Cover title only.)  
 No. 12. 1898, pp. 1101-1198. (Cover title only.) [Title-page and  
 table of contents for vol. 9, issued with this number. xvi pp.]
- 10 V. 10. 1898. 1899. 1899. xvi+1208 pp.  
 No. 1. 1898, v+100 pp. (Cover title only.)  
 No. 2. 1898, vi+101-200 pp. 2 pl. (Cover title only.)  
 No. 3. 1898, vi+201-300 pp. (Cover title only.)  
 No. 4. 1898, viii+301-400 pp. (Cover title only.)  
 No. 5. 1899, vi+401-500 pp. (Cover title only.)  
 No. 6. 1899, vi+501-600 pp. (Cover title only.)  
 No. 7. 1899, vii+601-700 pp. (Cover title only.)  
 No. 8. 1899, vi+701-800 pp. (Cover title only.)  
 No. 9. 1899, vi+801-900 pp. (Cover title only.)  
 No. 10. 1899, vi+901-1000 pp. (Cover title only.)  
 No. 11. 1899, vi+1001-1100 pp. (Cover title only.)  
 No. 12. 1899, pp. 1101-1208. (Cover title only.) [Title-page and  
 table of contents for vol. 10, issued with this number. xvi pp.]
- 11 V. 11. 1899-1900. 1900. xvi+1208 pp.  
 No. 1. 1899, vi+100 pp. (Cover title only.)  
 No. 2. 1899, vii+101-200 pp. (Cover title only.)  
 No. 3. 1899, vii+201-300 pp. (Cover title only.)  
 No. 4. 1899, vii+301-400 pp. (Cover title only.)  
 No. 5. 1899, vi+401-500 pp. (Cover title only.)  
 No. 6. 1900, v+501-600 pp. (Cover title only.)  
 No. 7. 1900, v+601-700 pp. (Cover title only.)  
 No. 8. 1900, v+701-800 pp. (Cover title only.)  
 No. 9. 1900, vi+801-900 pp. (Cover title only.)  
 No. 10. 1900, vi+901-1000 pp. (Cover title only.)  
 No. 11. 1900, vii+1001-1100 pp. (Cover title only.)  
 No. 12. 1900, pp. 1101-1208. (Cover title only.) [Title-page and  
 table of contents for vol. 11, issued with this number. xvi pp.]
- 12 V. 12. 1900-1901. 1901. xvi+1189 pp.  
 No. 1. 1900, vi+100 pp. (Cover title only.)  
 No. 2. 1900, vi+101-200 pp. (Cover title only.)  
 No. 3. 1900, viii+201-300 pp. (Cover title only.)  
 No. 4. 1900, vi+301-400 pp. (Cover title only.)  
 No. 5. 1901, vi+401-500 pp. (Cover title only.)  
 No. 6. 1901, vi+501-600 pp. (Cover title only.)  
 No. 7. 1901, vi+601-700 pp. (Cover title only.)  
 No. 8. 1901, vi+701-800 pp. (Cover title only.)  
 No. 9. 1901, vii+801-900 pp. (Cover title only.)  
 No. 10. 1901, vii+901-1000 pp. (Cover title only.)

## Tables

Classifica-  
tion no.

## A10. EXPERIMENT STATIONS OFFICE—Continued

### A10.6: Experiment station record—Continued

- 12 V. 12. 1900-1901—Continued  
No. 11. 1901, vii+1001-1100 pp. (Cover title only.)  
No. 12. 1901, pp. 1101-1189. (Cover title only.) [Title-page and table of contents for vol. 12, issued with this number. xvi pp.]
- 13 V. 13, 1901-1902. 1902. xviii+1206 pp.  
No. 1. 1901, viii+100 pp. (Cover title only.)  
No. 2. 1901, ix+101-200 pp. (Cover title only.)  
No. 3. 1901, ix+201-300 pp. (Cover title only.)  
No. 4. 1901, vii+301-400 pp. (Cover title only.)  
No. 5. 1902, viii+401-500 pp. (Cover title only.)  
No. 6. 1902, viii+501-604 pp. (Cover title only.)  
No. 7. 1902, ix+605-704 pp. 1 pl. (Cover title only.)  
No. 8. 1902, ix+705-806 pp. (Cover title only.)  
No. 9. 1902, viii+807-906 pp. 1 pl. (Cover title only.)  
No. 10. 1902, viii+907-1008 pp. (Cover title only.)  
No. 11. 1902, xi+1009-1112 pp. (Cover title only.)  
No. 12. 1902, pp. 1113-1206. (Cover title only.) [Title-page and table of contents for vol. 13, issued with this number. xviii pp.]
- 14 V. 14. No. 1. Sept., 1902. x+100 pp. (Cover title only.)  
No. 2. Oct., 1902, viii+101-204 pp. (Cover title only.)  
No. 3. Nov., 1902, viii+205-308 pp. (Cover title only.)  
No. 4. Dec., 1902, x+309-412 pp. (Cover title only.)

### A10.6a: Experiment station record (separates)

[The papers mentioned in the note under A10.6: were each issued separately. References to them will be found under the proper headings in the index to this work.]

### A10.7: Food and diet charts

- 1 No. 1. 1896.
- 2 No. 2. 1896.
- 3 No. 3. 1896.
- 4 No. 4. 1896.

### A10.8: Irrigation investigation schedules

- 1 No. 1. [Postal card for collection of statistics.] n. d.
- 2 No. 2. Duty of water, general instructions to observers; by Elwood Mead. March 1, 1899. n. t. p. 4 pp.
- 3 No. 3. [Circular letter and blank form for answers to queries.] n. d. 2 sheets.
- 4 No. 4. [Circular letter and blank form for answers to queries.] May 1, 1899. 4 sheets.

### A10.9: Hawaii agricultural experiment station bulletins

- 1 No. 1. Chickens and their diseases in Hawaii; by T. F. Sedgwick. 1901. 23 pp.
- 2 No. 2. Root rot of taro; by T. F. Sedgwick, Honolulu, Hawaii, Hawaiian Gazette Company, 1902. 21 pp.

### A10.10: Alaska agricultural experiment stations bulletins

- 1 No. 1. Suggestions to pioneer farmers in Alaska; by C. C. Georgeson. 1902. n. t. p. 15 pp. 7 pl.

### A10.11: Experiment station work (volumes)

- 1 Vol. 1. Experiment station work, vol. 1, including Experiment station work I-XX (Farmers' bulletins 56, 65, 69, 73, 78, 79, 84, 87, 92, 97, 103, 105, 107, 114, 119, 122, 124, 133, 144, 149). 1902. xiv+[628]+xviii pp.

[Title-page, table of contents, index, and glossary for this volume were issued as a pamphlet of xiv+xviii pages in order that the 20 numbers of Experiment station work which had been issued as Farmers' bulletins (A1.9:) might be brought together. As each bulletin bears its own paging, the references in the index are somewhat awkward; but in future provision will be made for the volumes by issuing an extra edition of the Farmers' bulletins which contain the numbers of Experiment station work, without the bulletin numbers and with continuous paging.]

Classification  
no.

**A10. EXPERIMENT STATIONS OFFICE—Continued**

**A10.12: Porto Rico agricultural experiment station bulletin**

- No. 1 not issued 1902.
- 2<sup>1</sup> No. 2. The changa, or mole cricket, in Porto Rico; by O. W. Barrett. 1902. 20 pp.
- 2<sup>2</sup> Same. In Spanish. (La changa, o'grillotalpa en Puerto Rico.) 1902. 20 pp.

**A11. FIBER INVESTIGATIONS OFFICE**

[Fiber investigations were begun by the Division of Statistics in 1889, and in 1890 a Section of Fiber Investigations was created in the Division. January 1, 1891, the Section was made independent, under the name Office of Fiber Investigations, and so continued until June 30, 1898, when its work was assigned to the Division of Botany. For historical sketch of Office, see Yearbook, 1897 (A1.10:897), p. 224.]

**A11.1: Annual reports**

**ANNUAL REPORT UPON FIBER INVESTIGATIONS**

- 890 1890 (Dodge), [1]+451-470 pp. (Also in A1.1:890, p. 451.)
- 891 1891 (Dodge), [1]+417-438 pp. 2 pl. (Also in A1.1:891, p. 417.)
- 892 1892 (Dodge), [1]+359-376 pp. 6 pl. (Also in A1.1:892, p. 359.)
- 893 1893 (Dodge), iii+567-584 pp. 1 pl. (Also in A1.1:893, p. 567.)
- 1894 (Dodge). (In A1.1:894, p. 197.)
- 1895 (Dodge). (In A1.1:895, p. 187.)

**REPORT OF SPECIAL AGENT OF OFFICE OF FIBER INVESTIGATIONS**

- 896 1896 (Dodge), [1]+27-28 pp. (Also in A1.1:896, p. 27.)
- 897 1897 (Dodge), iii+21-24 pp. (Also in A1.1:897, p. 21.)

**A11.2: General publications**

[Publications which originated in this Office but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of the Office issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

**A11.3: Bulletins**

None issued.

**A11.4: Circulars**

None issued.

**A11.5: Reports**

- ✓ 1 No. 1. Report on flax, hemp, ramie, and jute, with considerations upon flax and hemp culture in Europe, report on ramie machine trials of 1889 in Paris, and present status of fiber industries of U. S.; by Charles Richards Dodge. 2d ed. 1892. 104 pp.  
[For 1st edition see A27.8:1.]
- 2 No. 2. Recent facts regarding ramie industry in America, with brief statements relating to manufacture in Europe, etc.; by Charles Richards Dodge. 1893. 16 pp.  
[Reprinted from Rp. of Statistician, May, 1891.]
- 3 No. 3. Sisal hemp culture in United States [Florida], with statements relating to industry in Yucatan and Bahama Islands, and brief considerations upon question of machinery for extracting fiber; by Charles Richards Dodge. 1891. 59 pp. 8 pl.
- 4 No. 4. Flax culture for fiber in U. S., including special reports on flax culture in Ireland, Belgium, and Austria, with statements relative to the industry in Russia; by Charles Richards Dodge. 1892. 93 pp. 2 pl.
- 5 No. 5. Leaf fibers of U. S., detailing results of recent investigations relating to Florida sisal hemp, the false sisal hemp plant of Florida, and other fiber-producing agaves, bowstring hemp, pineapple fiber, New England flax, and bear grass; by Chas. Richards Dodge. 1893. 73 pp. 10 pl.
- 6 No. 6. Uncultivated bast fibers of U. S., including history of previous experiments with plants or fibers, and brief statements relating to allied species that are produced commercially in the old world; by Charles Richards Dodge. 1894. 54 pp. 5 pl.



## Tables

Classifica-  
tion no.

### A11. FIBER INVESTIGATION OFFICE—Continued

#### A11.5: Reports—Continued

- |    |   |
|----|---|
| 7  | No. 7. Cultivation of ramie in U. S., with statements concerning practice in foreign countries, cost of cultivation and percentages of yield, the machine question, and preparation of fiber for manufacture; by Chas. Richards Dodge. 1895. 63 pp. 5 pl. |
| 8  | No. 8. Culture of hemp and jute in U. S., with statements concerning practice in foreign countries, preparation of fiber for market, and remarks on the machine question; by Chas. Richards Dodge. 1896. 43 pp. 3 pl.                                     |
| 9  | No. 9. Descriptive catalogue of useful fiber plants of world, including structural and economic classifications of fibers; by Chas. Richards Dodge. 1897. 361 pp. 13 pl.  |
| 10 | No. 10. Flax culture for seed and fiber in Europe and America; by Charles Richards Dodge. 1898. 80 pp. 4 pl.  |
| 11 | No. 11. Culture of hemp in Europe, including special consular report on growth of hemp in Italy; by Charles Richards Dodge. 1898. 29 pp.  |

### A12. FOREIGN MARKETS DIVISION

[Formerly Section of Foreign Markets. For historical sketch of Division, see Yearbook, 1897 (A1.10:297), p. 270.]

#### A12.1: Annual reports

- |     |   |
|-----|---|
|     | 1897 (Hitchcock). (In A1.1:897, p. 177.)                      |
| 898 | 1898 (Hitchcock), iii+163-166 pp. (Also in A1.1:898, p. 163.) |
| 899 | 1899 (Hitchcock), iii+235-241 pp. (Also in A1.1:899, p. 235.) |
| 900 | 1900 (Hitchcock), iii+265-272 pp. (Also in A1.1:900, p. 265.) |
| 901 | 1901 (Hitchcock), iii+163-169 pp. (Also in A1.1:901, p. 163.) |
| 902 | 1902 (Hitchcock), [1]+377-382 pp. (Also in A1.1:902, p. 377.) |

#### A12.2: General publications

[Publications which originated in this Division but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of the Division issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

#### A12.3: Bulletins

- |                |   |
|----------------|---|
| 1 <sup>1</sup> | No. 1. World's markets for American products: Great Britain and Ireland. 1895. 93 pp.                                     |
| 1 <sup>2</sup> | Same, supplement. 1895. [2]+95-155 pp.  |
| 2              | No. 2. World's markets for American products: German Empire. 1895. 91 pp. 1 pl.   |
| 3              | No. 3. World's markets for American products: France. 1895. 74 pp.  |
| 4              | No. 4. World's markets for American products: Canada. 1895. 67 pp.  |
| 5              | No. 5. World's markets for American products: Netherlands. 1895. 76 pp.   |
| 6              | No. 6. World's markets for American products: Belgium. 1895. 90 pp.   |
| 7 <sup>1</sup> | No. 7. World's markets for American products: Norway. 1896. 68 pp.  |
| 7 <sup>2</sup> | Same, revised edition. 1898. 68 pp.   |
| 8 <sup>1</sup> | No. 8. World's markets for American products: Sweden. 1896. 92 pp.  |
| 8 <sup>2</sup> | Same, revised. 1898. 93 pp.   |
| 9              | No. 9. Trade of Denmark; by Frank H. Hitchcock. 1900. 88 pp. 1 pl.  |
| 10             | No. 10. Our foreign trade in agricultural products during five fiscal years, 1893-97; by Frank H. Hitchcock. 1898. 38 pp. |
| 11             | No. 11. Spain's foreign trade; by Frank H. Hitchcock. 1898. 47 pp.  |
| 12             | No. 12. Our trade with Spain, 1888-97; by Frank H. Hitchcock. 1898. 47 pp.  |
| 13             | No. 13. Trade of Puerto Rico; by Frank H. Hitchcock. 1898. 84 pp.   |
| 14             | No. 14. Trade of Philippine islands; by Frank H. Hitchcock. 1898. 160 pp. 1 pl.   |
| 15             | No. 15. Our foreign trade in agricultural products, 1894-98; by Frank H. Hitchcock. 1899. 45 pp.                          |

Classification  
no.

**A12. FOREIGN MARKETS DIVISION—Continued**

**A12.3: Bulletins—Continued**

- 16 No. 16. Distribution of agricultural exports of U. S., 1894-98; by Frank H. Hitchcock. 1899. 153 pp.
- 17 No. 17. Sources of agricultural imports of U. S., 1894-1898; by Frank H. Hitchcock. 1900. 118 pp.
- 18 No. 18. Our trade with Japan, China, and Hongkong, 1889-1899; by Frank H. Hitchcock. 1900. 168 pp.
- 19 No. 19. Our foreign trade in agricultural products, 1890-1899; by Frank H. Hitchcock. 1900. 62 pp.
- 20 No. 20. Agricultural exports of U. S., by countries, 1895-1899; by Frank H. Hitchcock. 1900. 88 pp.
- 21 No. 21. Agricultural imports of U. S., by countries, 1895-1899; by Frank H. Hitchcock. 1900. 74 pp.
- 22 No. 22. Our trade with Scandinavia, 1890-1900; by Frank H. Hitchcock. 1901. 124 pp.
- 23 No. 23. Our foreign trade in agricultural products, 1891-1900; by Frank H. Hitchcock. 1900. 61 pp.
- 24 No. 24. Sources of agricultural imports of U. S., 1896-1900; by Frank H. Hitchcock. 1901. 120 pp.
- 25 No. 25. Distribution of agricultural exports of U. S., 1896-1900; by Frank H. Hitchcock. 1901. 182 pp.
- 26 No. 26. Agricultural imports of the United Kingdom, 1896-1900; by Frank H. Hitchcock. 1902. 227 pp.
- 27 No. 27. Our foreign trade in agricultural products, 1892-1901; by Frank H. Hitchcock. 1902. 67 pp.
- 28 No. 28. Sources of agricultural imports of U. S., 1897-1901; by Frank H. Hitchcock. 1902. 132 pp.
- 29 No. 29. Distribution of agricultural exports of U. S., 1897-1901; by Frank H. Hitchcock. 1902. 202 pp.

**A12.4: Circulars**

- 1 No. 1. Peaches and other fruits in England. June 1, 1895. n. t. p. 2+ [1] pp.
- 2<sup>1</sup> No. 2. American dried apples in German Empire. n. t. p. n. d. 4 pp.
- 2<sup>2</sup> Same, 2d series [edition]. n. t. p. 3+ [1] pp.
- 3 No. 3. Imports and exports for 1893 and 1894. Aug. 19, 1895. n. t. p. 4 pp.
- 4 No. 4. Example for American farmers and dairymen. n. t. p. n. d. 3 pp.
- 5 No. 5. Treaty of Shimonoseki between China and Japan of April 17, 1895, and our possibilities of trade with those countries. Oct. 16, 1895. n. t. p. 7 pp.
- 6 No. 6. Imports and exports for 1893, 1894, and 1895. n. d. n. t. p. 6 pp.
- 7 No. 7. Extension of markets for American feed stuffs. n. d. n. t. p. 8 pp.
- 8 No. 8. Manchester district of England as market for American products. n. d. n. t. p. 8 pp.
- 9 No. 9. Imports and exports for 1893, 1894, 1895, and 1896. n. d. n. t. p. 8 pp.
- 10 No. 10. Course of wheat production and exportation in United States, Canada, Argentina, Uruguay, Russia, and British India, 1880-96. Oct. 23, 1896. n. t. p. 8 pp.
- 11 No. 11. Agricultural products imported and exported by United States, 1892-96. Jan. 9, 1897. n. t. p. 8 pp.
- 12 No. 12. Sources of principal agricultural imports of United States during 5 years ended June 30, 1896. Jan. 22, 1897. n. t. p. 24 pp.
- 13 No. 13. Distribution of principal agricultural exports of United States during 5 years ended June 30, 1896. Feb. 6, 1897. n. t. p. 24 pp.
- 14 No. 14. Hamburg as market for American products. Mar. 2, 1897. n. t. p. 10 pp.
- 15 No. 15. Exports of cotton from Egypt. May 12, 1897. n. t. p. 7 pp.  
[Reprinted from Bull. 2, Experiment Stations Office.]
- 16 No. 16. Our trade with Cuba from 1887 to 1897. June 10, 1897. n. t. p. 30 pp.



## Tables

Classifica-  
tion no.

## A12. FOREIGN MARKETS DIVISION—Continued

### A12.4: Circulars—Continued

- |                 |   |
|-----------------|---|
| 17              | No. 17. United States wheat for Eastern Asia. June 22, 1897. n. t. p. 8 pp.   |
| 18 <sup>1</sup> | No. 18. Hawaiian commerce, from 1887 to 1897. July 10, 1897. n. t. p. 37 pp.  |
| 18 <sup>2</sup> | Same, revised. May 12, 1898. n. t. p. 37 pp.  |
| 19              | No. 19. Austria-Hungary as factor in world's grain trade; Recent use of American wheat in that country. Oct. 5, 1897. n. t. p. 23 pp. |
| 20              | No. 20. Agricultural imports and exports, 1893-97. Jan. 22, 1898. n. t. p. 15 pp.   |
| 21              | No. 21. Agricultural imports and exports, 1894-98. Apr. 24, 1899. n. t. p. 16 pp.   |
| 22              | No. 22. Agricultural imports and exports, 1895-99. Apr. 23, 1900. n. t. p. 16 pp.   |
| 23              | No. 23. Agricultural imports and exports, 1896-1900. Feb. 20, 1901. 16 pp.  |
| 24              | No. 24. Agricultural imports and exports, 1897-1901. Apr. 10, 1902. n. t. p. 16 pp.   |

## A13. FORESTRY BUREAU

[Formerly Division of Forestry. For historical sketch, see Yearbook 1897 (A1.10:897), p. 143.]

### A13.1: Annual reports

- |     |   |
|-----|---|
|     | REPORT OF CHIEF OF DIVISION OF FORESTRY   |
|     | 1883 (Egleston). (In A1.1:883, p. 444.)   |
|     | 1884 (Egleston). (In A1.1:884, p. 137.)   |
|     | 1885 (Egleston). (In A1.1:885, p. 183.)   |
| 886 | 1886 (Fernow), [1]+149-226 pp. 1 pl. (Also in A1.1:886, p. 149.)                    |
| 887 | 1887 (Fernow), [1]+156 pp. (Abstract (pp. 605-616. 1 map.)<br>In A1.1:887, p. 605.) |
| 888 | 1888 (Fernow), iv+597-641 pp. 1 pl. (Also in A1.1:888, p. 597.)                     |
| 889 | 1889 (Fernow), iv+273-330 pp. (Also in A1.1:889, p. 273.)                           |
| 890 | 1890 (Fernow), iii+193-236 pp. (Also in A1.1:890, p. 193.)                          |
| 891 | 1891 (Fernow), [1]+191-229 pp. 8 pl. (Also in A1.1:891, p. 191.)                    |
| 892 | 1892 (Fernow), iii+293-358 pp. 6 pl. (Also in A1.1:892, p. 293.)                    |
| 893 | 1893 (Fernow), iv+303-363 pp. 3 pl. (Also in A1.1:893, p. 303.)                     |
|     | 1894 (Fernow). (In A1.1:894, p. 133.)   |
|     | 1895 (Fernow). (In A1.1:895, p. 149.)   |
| 896 | 1896 (Fernow), iii+83-88 pp. (Also in A1.1:896, p. 83.)                             |
| 897 | 1897 (Fernow), ii+141-146 pp. (Also in A1.1:897, p. 141.)                           |
| 898 | 1898 (Pinchot), iii+169-173 pp. (Also in A1.1:898, p. 169.)                         |
|     | REPORT OF FORESTER.   |
| 899 | 1899 (Pinchot), iii+93-100 pp. (Also in A1.1:899, p. 93.)                           |
| 900 | 1900 (Pinchot), iii+103-110 pp. (Also in A1.1:900, p. 103.)                         |
| 901 | 1901 (Pinchot), iii+325-339 pp. (Also in A1.1:901, p. 325.)                         |
| 902 | 1902 (Pinchot), iv+109-136 pp. (Also in A1.1:902, p. 109.)                          |

### A13.2: General publications

[Publications which originated in this Bureau, but which were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of the Bureau issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

- |     |  |
|-----|--|
| B48 | Big trees of California. 1900. 30 pp. 17 pl.<br>[Also issued as Bulletin no. 28. See A13.3:28.]  |
| F76 | Forest growth. Letter to Secretary of Agriculture regarding forest growth and timber consumption; by B. E. Fernow. Apr. 5, 1893. n. t. p. 3 pp.    |
| L97 | Lumber and wood trade. Letter from agent of Forestry Division requesting information as to extent of lumber and wood trade. July, 1883. f° sheet.* |
| P65 | Pines. Instructions for collection of test pieces of pines for timber investigations. [1892.] n. t. p. 4 pp.                                       |

\*No copy found.

Classifica-  
tion no.**A13. FORESTRY BUREAU—Continued****A13.2: General publications—Continued**

- R13 Railroads. Alphabetical list of land-grant and bond-aided railroads in U. S. (Extract from Army general orders, no. 140, and supplement.) 1902. 4 pp.
- St2 Statement of B. E. Fernow, Chief of Division of Forestry, Agriculture Department, before House Committee on Agriculture. Feb. 16, 1895. n. t. p. 4 pp.
- T71 Trees of Washington, D. C.; compliments of Forestry Division, G. B. Sudworth, botanist, B. E. Fernow, chief. [Wash., Bell Bros., 1891.] [16] pp. [2] maps. oblong 24° pap.\*

**A13.3: Bulletins.**

- 1 No. 1. Relation of railroads to forest supplies and forestry; with appendices on structure of some timber ties, their behavior, and cause of their decay in road-bed; on wood preservation; on metal ties; and on use of spark arresters. 1887. 149 pp. 19 pl.
- 2<sup>1</sup> No. 2. Forest conditions of Rocky Mountains, and other papers; with maps showing location of forest areas on Rocky Mountain range. 1888. 252+[1] pp. 1 pl. 2 folded tables. 1 map.
- 2<sup>2</sup> Same. 2d edition. 1889.\*
- 3 No. 3. Preliminary report on use of metal track on railways as substitute for wooden ties, by E. E. Russell Tratman; to which is added a report of experiments in wood seasoning by Chicago, Burlington and Quincy Railroad Company, and other notes; compiled by B. E. Fernow. 1889. 79 pp.
- 4 No. 4. Substitution of metal for wood in railroad ties, by E. E. Russell Tratman; with discussion on practicable economies in use of wood for railway purposes, by B. E. Fernow. 1890. 363 pp. 31 pl.  
[For supplemental matter, see Bull. 9.]
- 5 No. 5. What is forestry? by B. E. Fernow. 1891. 52 pp.
- 6 No. 6. Timber physics: pt. 1, Preliminary report: Need of investigation; Scope and historical development of science of "Timber Physics"; Organization and methods of timber examinations in Division of Forestry; compiled by B. E. Fernow. 1892. iii+57+iv pp. 6 pl. 4°  
[For pt. 2, see Bull. 8.]
- 7<sup>1</sup> No. 7. Forest Influences: (1) Introduction and summary of conclusions, by B. E. Fernow; (2) Review of forest meteorological observations, a study preliminary to discussion of relation of forests to climate, by M. W. Harrington; (3) Relation of forests to water supplies, by B. E. Fernow; (4) Notes on sanitary significance of forests, by B. E. Fernow. Appendices: (1) Determination of true amount of precipitation and its bearing on theories of forest influences, by Cleveland Abbe; (2) Analysis of rainfall with relation to surface conditions, by George E. Curtis. 1893. 197 pp.
- 7<sup>2</sup> Same, reprinted 1902. 197 pp.
- 8 No. 8. Timber physics: pt. 2, Progress report: Results of investigations on long-leaf pine (*Pinus palustris*). 1893. vii+92 pp. 12 pl. 4°  
[For pt. 1, see Bulletin 6.]
- 9 No. 9. Use of metal railroad ties and preservative processes and metal tie-plates for wooden ties; by E. E. Russell Tratman. Supplementary to [Bulletin no. 4] report on substitution of metal for wood in railroad ties, 1890. 1894. 363 pp. 5 pl.
- 10 No. 10. Timber, an elementary discussion of characteristics and properties of wood; by Filibert Roth. 1895. 88 pp.
- 11 No. 11. Some foreign trees for Southern States. 1895. 32 pp. 3 pl.
- 12<sup>1</sup> No. 12. Economical designing of timber trestle bridges; by A. L. Johnson. 1896. 57 pp.
- 12<sup>2</sup> Same, 1902. 57 pp.
- 13<sup>1</sup> No. 13. Timber pines of southern United States, by Charles Mohr; with discussion of structure of their wood, by Filibert Roth. 1896. 160 pp. 27 pl. 4°.
- 13<sup>2</sup> Same, rev. ed. 1897. 176 pp. 27 pl. 4°

\* No copy found.

## Tables

Classifica-  
tion no.

## A13. FORESTRY BUREAU—Continued

### A13.3: Bulletins—Continued

- |                 |  |
|-----------------|--|
| 14              | No. 14. Nomenclature of arborescent flora of United States; by George B. Sudworth. 1897. viii+419 pp.  |
| 15              | No. 15. Forest growth and sheep grazing in Cascade Mountains of Oregon; by Frederick V. Coville. 1898. 54 pp.  |
| 16              | No. 16. Forestry conditions and interests of Wisconsin, by Filibert Roth; with a discussion by B. E. Fernow. 1898. 76 pp. 1 pl.  |
| 17              | No. 17. Checklist of forest trees of United States, their names and ranges; by George B. Sudworth. 1898. 144 pp.   |
| 18              | No. 18. Experimental tree planting in the plains; by Charles A. Keffer. 1898. 94 pp. 5 pl.   |
| 19              | No. 19. Osier culture; by John M. Simpson. 1898. 27 pp.  |
| 20              | No. 20. Measuring the forest crop; by A. K. Mlodziansky. 1898. 71 pp. 2 pl.  |
| 21              | No. 21. Systematic plant introduction, its purposes and methods; by David G. Fairchild. 1898. 24 pp.   |
| 22              | No. 22. White pine, by V. M. Spalding, rev. and enlar. by B. E. Fernow; with contributions: Insect enemies of white pine, by F. H. Chittenden; Wood of white pine, by Filibert Roth. 1899. 185 pp. 14 pl. 4°   |
|                 | No. 23. Not issued 1902.   |
| 24 <sup>1</sup> | No. 24. Primer of forestry; by Gifford Pinchot. Part 1, The forest. 1899. 88 pp. 48 pl. 12°  |
|                 | Same, 56th Cong., 1st sess., H. doc. 727; serial no. 4007.   |
| 24 <sup>2</sup> | Same, 2d edition, authorized by Congress, April 18, 1900. 1900. 88 pp. 48 pl. 12°  |
| 25              | No. 25. Notes on forest conditions of Porto Rico; by Robert T. Hill. 1899. 48 pp. 9 pl.  |
| 26              | No. 26. Practical forestry in the Adirondacks; by Henry S. Graves. 1899. 85 pp. 20 pl.   |
| 27              | No. 27. Practical tree planting in operation; by J. W. Tourney. 1900. 27 pp. 4 pl.   |
| 28              | No. 28. Short account of big trees of California. 1900. 30 pp. 17 pl.<br>Same, 56th Cong., 1st. sess., S. doc. 393; serial no. 3877.<br><i>See also</i> A13.2: B48.  |
| 29              | No. 29. Forest nursery: collection of tree seeds and propagation of seedlings; by Geo. B. Sudworth. 1900. 63 pp. 6 pl.   |
| 30              | No. 30. Forest-working plan for Township 40, Totten and Crossfield purchase, Hamilton county, N. Y. State forest preserve; by Ralph S. Hosmer and Eugene S. Bruce; preceded by discussion of conservative lumbering and water supply by Frederick H. Newell. 1901. 64 pp. 11 pl. 4 maps. |
| 31              | No. 31. Notes on red cedar; by Charles Mohr. 1901. 37 pp. 3 pl.  |
| 32              | No. 32. Working plan for forest lands near Pine Bluff, Ark.; by Frederick E. Olmsted. 1902. 48 pp. 10 pl. large 8°   |
| 33              | No. 33. Western hemlock; by Edward T. Allen. 1902. 55 pp. 13 pl.   |
| 34              | No. 34. History of lumber industry in State of New York; by William F. Fox. 1902. 59 pp. 20 pl. large 8°   |
| 35              | No. 35. Eucalypts cultivated in U. S.; by Alfred James McClatchie. 1902. 106 pp. 92 pl. large 8°   |
| 36 <sup>1</sup> | No. 36. The woodsman's handbook; by Henry Solon Graves. Pt. 1. 1902. 148 pp. 1 pl. 16°   |
| 36 <sup>2</sup> | Same, errata. n. d. n. t. p. 4 pp. 16°   |
| 37              | No. 37. Hardy catalpa. 1. The hardy catalpa in commercial plantations, by William L. Hall; 2. Diseases of hardy catalpa, by Herman von Schrenk. 1902. 58 pp. 31 pl. large 8°   |

### A13.3<sup>a</sup>: Bulletins (separates)

[Insect enemies of white pine, by F. H. Chittenden, issued as separate from Bulletin no. 22, is the only separate of which we have any record.]

### A13.4: Circulars

- |   |   |
|---|---|
| 1 | [No. 1.] Request to educators for cooperation. 1886. 4 pp.* |
| 2 | [No. 2.] To educational men. 1887. (Circ.)                  |

\*No copy found.

Classifica-  
tion no.**A13. FORESTRY BUREAU—Continued****A13.4: Circulars—Continued**

- ✓ 3 [No. 3.] Increasing durability of timber; information to wood consumers; by Norman J. Colman. 1887. [4] pp.
- ✓ 4 [No. 4.] For information of railroad managers [chestnut oak for ties; by Norman J. Colman]. Dec., 1887. n. t. p. 3 pp. 4°
- 5 No. 5. Arbor day planting in Eastern States. n. d. n. t. p. [4] pp. 4°
- 6 No. 6. Instructions for growing tree seedlings. n. d. n. t. p. [4] pp. 4°
- ✓ 7 No. 7. Government timber tests; by B. E. Fernow. n. d. n. t. p. [4] pp.
- 8 No. 8. Strength of "boxed" or "turpentine" timber; by B. E. Fernow. n. d. n. t. p. 3 pp.
- 9 No. 9. Effect of turpentine gathering on timber of pine; by B. E. Fernow. n. d. (Circ.)
- 10 No. 10. Suggestions to lumbermen of U. S. in behalf of more rational forest management; by B. E. Fernow. n. d. n. t. p. 8 pp.
- 11 No. 11. Facts and figures regarding our forest resources, briefly stated; by B. E. Fernow. Feb. 10, 1896. n. t. p. 8 pp.
- 12 No. 12. Southern pine; mechanical and physical properties [investigations of J. B. Johnson and Filibert Roth]; by B. E. Fernow. Mar. 6, 1896. n. t. p. 12 pp. 4°
- 13 No. 13. Forest fire legislation in United States; by B. E. Fernow. Mar. 16, 1896. n. t. p. 8 pp.
- 14 No. 14. Is protection against forest fires practicable? by B. E. Fernow. n. d. n. t. p. 4 pp.
- 15 No. 15. Summary of mechanical tests on 32 species of American woods; by B. E. Fernow. n. d. n. t. p. 12 pp. 4°
- 16 No. 16. Age of trees and time of blazing determined by annual rings; by B. E. Fernow. Aug. 18, 1897. n. t. p. 11 pp.
- 17<sup>1</sup> No. 17. Recent legislation on State forestry commissions and forest reserves; by B. E. Fernow. n. d. n. t. p. 15 pp.
- 17<sup>2</sup> Same, revised. Dec. 15, 1897. n. t. p. 16 pp.
- 18 No. 18. Progress in timber physics; by B. E. Fernow. Jan. 2, 1898. n. t. p. 20 pp. 4°
- 19 No. 19. Progress in timber physics; by Filibert Roth. May 25, 1898. n. t. p. 24 pp. 4°
- ✓ 20 No. 20. Increasing durability of timber; by B. E. Fernow. May 25, 1898. n. t. p. 5 pp.
- 21 No. 21. Practical assistance to farmers, lumbermen, and others in handling forest lands; by Gifford Pinchot. Oct. 8, 1898. n. t. p. 5 pp.
- 22<sup>1</sup> No. 22. Practical assistance to tree planters; by Gifford Pinchot. July 8, 1899. n. t. p. 11 pp.
- 22<sup>2</sup> Same, rev. ed. Feb. 15, 1901. n. t. p. 12 pp.
- 23 No. 23. Suggestions to prospective forest students; by Gifford Pinchot. Jan. 15, 1902. n. t. p. 5 pp.

**A13.5: Report on forestry**

[Vols. 1 and 2 were published prior to the establishment of the Forestry Division, but are classified here in order to bring all the volumes together, as vols. 3 and 4 were prepared and transmitted by the chief of the Forestry Division.]

- 1 [V. 1.] 1878; by Franklin B. Hough. 650 pp.
- 2 V. 2. 1880; by Franklin B. Hough. xvi+618 pp.  
Same, 46th Cong., 2d sess., H. ex. doc. 37; serial no. 1922.
- 3 [V. 3.] 1882; by Franklin B. Hough. xii+318 pp.  
Same, 47th Cong., 1st sess., H. mis. doc. 38; serial no. 2046.
- 4 V. 4. 1884; by Nathaniel H. Eggleston. [1]+421 pp. 4 pl.

**A13.6: Press bulletins (circ.)**

[Notes on work and publications relative to forestry, issued for use of press.]

- 1 No. 1. Feb. 3, 1900.
- 2 No. 2. Feb. 17, 1900.
- 3 No. 3. Mar. 3, 1900.
- 4 No. 4. Mar. 23, 1900.
- 5 No. 5. Apr. 9, 1900.
- 6 No. 6. May 2, 1900.

**Tables**Classifica-  
tion no.**A13. FORESTRY BUREAU—Continued****A13.6: Press bulletins—Continued**

7	No. 7. June 6, 1900.
8 <sup>1</sup>	No. 8. July 7, 1900.
8 <sup>2</sup>	No. 8. New York supp., July 7, 1900.
9	No. 9. Aug. 11, 1900.
10	No. 10. Nov. 15, 1900.
11	No. 11. Feb. 7, 1901.
12	No. 12. Mar. 7, 1901.
13	No. 13. Apr. 8, 1901.
14	No. 14. July 8, 1901.
15	No. 15. Oct. 30, 1901.
16	No. 16. Jan. 10, 1902.
17	No. 17. July 16, 1902.
18	No. 18. Aug. 12, 1902.
19	No. 19. Aug. 12, 1902.
20	No. 20. Sept. 5, 1902.
21	No. 21. Sept. 30, 1902.
22	No. 22. Sept. 30, 1902.
23	No. 23. Nov. 14, 1902.
24	No. 24. Damage by recent forest fires. n. d.
25	No. 25. Dec. 10, 1902.

**A14. GARDENS AND GROUNDS DIVISION**

[Merged into Bureau of Plant Industry July 1, 1901, see A19. For historical sketch of Division, see Yearbook, 1897 (A1.10:897), p. 180.]

**A14.1: Annual reports****SUPERINTENDENT OF EXPERIMENTAL GARDEN.**

- 1862 (Saunders). (In A1.1:862, p. 540.)  
 1863 (Saunders). (In A1.1:863, p. 547.)  
 1864 (Saunders). (In A1.1:864, p. 605.)  
 1865 (Saunders). In A1.1:865, p. 13.)  
 1866 (Saunders). In A1.1:866, p. 17.)  
 1867 (Saunders). (In A1.1:867, p. 23.)

**SUPERINTENDENT OF GARDENS AND GROUNDS.**

- 1868 (Saunders). (In A1.1:868, p. 118.)  
 1869 (Saunders). (In A1.1:869, p. 79.)  
 1870 (Saunders). (In A1.1:870, p. 16.)  
 1871 (Saunders). (In A1.1:871, p. 102.)  
 1872 to 1875, no reports printed.  
 1876 (Saunders). (In A1.1:876, p. 61.)  
 1877 (Saunders). In A.1.1:877, p. 47.)  
 1878 (Saunders). (In A1.1:878, p. 194.)  
 1879 (Saunders). (In A1.1:879, p. 359.)  
 1880, no report printed.  
 1881 and 1882 (Saunders). (In A1.1:881-2, p. 215.)  
 1883 (Saunders). (In A1.1:883, p. 181.)  
 1884, no report printed.  
 1885 (Saunders). (In A1.1:885, p. 33.)  
 1886 (Saunders). (In A1.1:886, p. 687.)  
 1887 (Saunders). (In A1.1:887, p. 673.)  
 1888, no report printed.  
 1889 (Saunders). (In A1.1:889, p. 111.)  
 890 1890 (Saunders). [1]+557-596 pp. (Also in A1.1:890, p. 557.)  
 891 1891 (Saunders). [1]+463-484 pp. 7 pl. (Also in A1.1:891, p. 463.)  
 892 1892 (Saunders). iii+377-402 pp. (Also in A1.1:892, p. 377.)  
 893 1893 (Saunders). iii+365-388 pp. (Also in A1.1:893, p. 365.)  
 1894 (Saunders). (In A1.1:894, p. 207.)  
 1895 (Saunders). (In A1.1:895, p. 189.)  
 1896, no report printed.  
 1897 (Saunders). (In A1.1:897, p. 159.)  
 1898 (Saunders). (In A1.1:898, p. 143.)  
 899 1899 (Saunders). iii+91-92 pp. (Also in A1.1:899, p. 91.)

Classification  
no.

**A14. GARDENS AND GROUNDS DIVISION—Continued**

**A14.1: Annual reports—Continued**

- 900 **SUPERINTENDENT OF GARDENS AND GROUNDS—Continued**  
1900 (Galloway). ii+273-278 pp. (Also in A1.1:900, p. 273.)  
1901 (Corbett). [This final report of the division was made through the chief of the Bureau of Plant Industry, forming part of his annual report for 1901. See A1.1:901, p. 81; also A19.1:901, p. 81.]

**A14.2: General publications**

None issued.

**A14.3: Bulletins**

None issued.

**A14.4: Circulars**

- 1 No. 1. An experiment in tea culture; report on tea gardens of Dr. Charles U. Shepard, Pinehurst, S. C., by William Saunders. [1897.] n. t. p. 10 pp.

**A15. IRRIGATION INQUIRY OFFICE.**

[Discontinued June 30, 1896.]

**A15.1: Annual reports**

- SPECIAL AGENT IN CHARGE OF ARTESIAN AND UNDERFLOW INVESTIGATIONS AND OF IRRIGATION INQUIRY.**  
890 1890 (Hinton). [1]+471-488 pp. map. (Also in A1.1:890, p. 471.)  
891 1891 (Hinton). [1]+439-450 pp. map. (Also in A1.1:891, p. 439.)  
1892, no report printed.  
**SPECIAL AGENT IN CHARGE OF IRRIGATION INQUIRY.**  
1893 (Irish). (In A1.1:893, p. 593.)  
**CHIEF OF OFFICE OF IRRIGATION INQUIRY.**  
1894 (Irish). (In A1.1:894, p. 219.)  
1895 (Irish). (In A1.1:895, p. 183.)

**A15.2: General publications**

[Publications which originated in this Office, but which were published in a numbered series of the Secretary's Office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of the Office issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

- Ar7 Artesian wells. Report on preliminary investigation to determine proper location of artesian wells within area of ninety-seventh meridian, and east of foothills of Rocky Mountains; [by Richard J. Hinton, and others]. 1890. 398 pp. 15 pl.  
Same, 51st Cong., 1st sess., S. ex. doc. 222; serial no. 2689.  
Ir7<sup>1</sup> Irrigation in U. S.; by Richard J. Hinton. 1887. 240 pp. 9 pl.  
Same, 49th Cong., 2d sess., S. mis. doc. 15; serial no. 2450.  
Ir7<sup>2</sup> Irrigation. [Report on irrigation.] (52d Cong., 1st sess., S. ex. doc. 41, in 4 parts.) 1893. (No serial title-page; 4 pts. bound in one vol.)  
Contents:  
Pt. 1. Irrigation and cultivation of soil thereby, with physical data, conditions, and progress within U. S. for 1891; by Richard J. Hinton. 1893. 459 pp. 52 pl.  
Pt. 2. Artesian and underflow investigation; Final report of Chief Engineer Edwin S. Nettleton. 1893. 116 pp. 29 pl.  
Pt. 3. Final geological reports of artesian and underflow investigation between 97th meridian of longitude and foothills of Rocky Mountains; by Robert Hay. 1893. 209 pp. 41 pl.  
Pt. 4. Final report on mid-plains division of artesian and underflow investigation between 97th meridian of longitude west of Greenwich and foothills of Rocky Mountains, by J. W. Gregory; and special report on certain artesian conditions in State of South Dakota; by Fred F. B. Coffin. 1893. 61 pp. 8 pl.  
P94<sup>1</sup> Progress report on irrigation in U. S. for 1890, by R. J. Hinton. Pt. 1. 1891. 337 pp. 5 pl.  
P94<sup>2</sup> Same, pt. 2. Progress report of artesian and underflow investigation between ninety-seventh degree of west longitude and foothills of Rocky Mountains; by E. S. Nettleton. 1891. 14 pp. 12 maps (called appendixes).  
Same, 51st Cong., 2d sess., S. ex. doc. 53, pts. 1 and 2; serial no. 2818.

**Tables**Classification  
no**A15. IRRIGATION INQUIRY OFFICE—Continued****A15.3: Bulletins**

- 1 No. 1. Abstract of laws of the several States and Territories on irrigation and water rights; compiled by O. A. Critchett. 1893. 180 pp.

**A15.4: Circulars**

None issued.

**A16. LABOR EMPLOYMENT BOARD****A16.1: Annual reports**

None issued.

**A16.2: General publications**

- In7 Instructions to applicants for appointment to position of mere unskilled laborer in U. S. Department of Agriculture, at Washington, D. C., July 18, 1902. n. t. p. 3 pp.
- R26 Regulations governing appointment to position of mere unskilled laborer under Department of Agriculture in D. C., July 2, 1902. n. t. p. 4 pp.

**A16.3: Bulletins**

None issued.

**A16.4: Circulars**

None issued.

**A17. LIBRARY**

[For historical sketch of Library see Yearbook, 1897 (A1.10:897), p. 220.]

**A17.1: Annual reports**

- 1894 (Cutter) (In A1.1: 894, p. 203.)
- 1895 to 1897, no reports printed.
- 1898 (Cutter) (In A1.1: 898, p. 167.)
- 899 1899 (Cutter) iii+213-214 pp. (Also in A1.1:899, p. 213.)
- 900 1900 (Cutter) ii+111-112 pp. (Also in A1.1:900, p. 111.)
- 901 1901 (Clark) iii+171-173 pp. (Also in A1.1:901, p. 171.)
- 902 1902 (Clark) ii+235-239 pp. (Also in A1.1:902, p. 235.)

**A17.2: General publications**

[The Library issues printed Catalogue cards (author and subject analyticals) for the publications of the Department, its endeavor being to fully catalogue such publications. These cards are supplied to libraries by the Department.]

**A17.3: Bulletins**

- 1 No. 1. Accessions to Department Library, [Jan.-Mar.] 1894. Apr., 1894. n. t. p. 12 pp. 4°
- 2 No. 2. Periodicals and society publications, currently [1894] received at Department Library, June, 1894. n. t. p. 8 pp. 4°
- 3 No. 3. Accessions to Department Library, April-June, 1894. Aug., 1894. n. t. p. 11 pp. 4°
- 4 No. 4. Accessions to Department Library, July-Oct., 1894. Dec., 1894. n. t. p. 9 pp. 4°
- 5 No. 5. Accessions to Department Library, Nov.-Dec., 1894. Feb., 1895. n. t. p. 7 pp. 4°
- 6 No. 6. Accessions to Department Library, Jan.-Mar., 1895. May, 1895. n. t. p. 12 pp. 4°
- 7 No. 7. Accessions to Department Library, Apr.-June, 1895. Aug., 1895. n. t. p. 11 pp. 4°
- 8 No. 8. Accessions to Department Library, July-Sept., 1895. Nov., 1895. n. t. p. 11 pp. 4°
- 9 No. 9. List of publications of U. S. Department of Agriculture from 1841 to June 30, 1895, inclusive; [compiled by Adelaide R. Hasse]. 1896. 76 pp.



Classifica-  
tion no.

**A17. LIBRARY—Continued**

**A17.3: Bulletins—Continued**

- |    |  |                           |
|----|--|---------------------------|
| 10 | No. 10. Accessions to Department Library, Oct.–Dec., 1895.   | Feb., 1896.               |
|    | n. t. p. 14 pp. 4°   |                           |
| 11 | No. 11. Accessions to Department Library, Jan.–Mar., 1896.   | May, 1896.                |
|    | n. t. p. 15 pp. 4°   |                           |
| 12 | No. 12. Accessions to Department Library, Apr.–June, 1896.   | Aug., 1896.               |
|    | n. t. p. 14 pp. 4°   |                           |
| 13 | No. 13. Accessions to Department Library, July–Sept., 1896.  | Oct., 1896.               |
|    | n. t. p. 10 pp. 4°   |                           |
| 14 | No. 14. Accessions to Department Library, Oct.–Dec., 1896.   | Feb., 1897.               |
|    | n. t. p. 13 pp. 4°   |                           |
| 15 | No. 15. Accessions to Department Library, Jan.–Mar., 1897.   | May, 1897.                |
|    | n. t. p. 15 pp. 4°   |                           |
| 16 | No. 16. References to literature of sugar beet exclusive of works in foreign languages; compiled by Claribel R. Barnett. June, 1897.                       | n. t. p. 9 pp. 4°         |
|    | [Title and contents supplied for binding nos. 1–8, 10–16.]   |                           |
| 17 | No. 17. Accessions to Department Library, Apr.–June, 1897.   | Aug. 1897.                |
|    | n. t. p. 26 leaves.  |                           |
| 18 | No. 18. Bibliography of poultry; compiled by Emma B. Hawks. Oct. 1897.   | n. t. p. 32 leaves.       |
| 19 | No. 19. Accessions to Department Library, July–Sept., 1897.  | Nov., 1897.               |
|    | n. t. p. 25 leaves.  |                           |
| 20 | No. 20. Reference list of publications relating to edible and poisonous mushrooms; compiled by Josephine A. Clark. Jan. 1898.                              | 16 pp.                    |
| 21 | No. 21. Accessions to Department Library, Oct.–Dec., 1897.   | Feb., 1898.               |
|    | n. t. p. 23 leaves.  |                           |
| 22 | No. 22. Accessions to Department Library, Jan.–Mar., 1898.   | Apr., 1898.               |
|    | n. t. p. 38 pp.  |                           |
| 23 | No. 23. Accessions to Department Library, Apr.–June, 1898.   | Aug., 1898.               |
|    | n. t. p. 25 pp.  |                           |
| 24 | No. 24. List of publications relating to forestry in Department Library. 1898.   | 93 leaves.                |
| 25 | No. 25. Accessions to Department Library, July–Sept., 1898.  | Nov., 1898.               |
|    | n. t. p. 16 leaves.  |                           |
| 26 | No. 26. Accessions to Department Library, Oct.–Dec., 1898.   | Feb., 1899.               |
|    | n. t. p. 24 leaves.  |                           |
| 27 | No. 27. Accessions to Department Library, Jan.–Mar., 1899.   | Apr., 1899.               |
|    | n. t. p. 20 leaves.  |                           |
| 28 | No. 28. Accessions to Department Library, Apr.–June, 1899.   | July, 1899.               |
|    | n. t. p. 23 leaves.  |                           |
| 29 | No. 29. Accessions to Department Library, July–Sept., 1899.  | Nov., 1899.               |
|    | n. t. p. 21 leaves.  |                           |
| 30 | No. 30. Accessions to Department Library, Oct.–Dec., 1899.   | Feb., 1900.               |
|    | 23 leaves.   |                           |
| 31 | No. 31. Accessions to Department Library, Jan.–Mar., 1900.   | May, 1900.                |
|    | n. t. p. 25 leaves.  |                           |
| 32 | No. 32. Accessions to Department Library, Apr.–June, 1900.   | Aug., 1900.               |
|    | n. t. p. 23 leaves.  |                           |
| 33 | No. 33. Accessions to Department Library, July–Sept., 1900.  | Nov., 1900.               |
|    | n. t. p. 19 leaves.  |                           |
| 34 | No. 34. Accessions to Department Library, Oct.–Dec., 1900.   | Feb., 1901.               |
|    | n. t. p. 28 leaves.  |                           |
| 35 | No. 35. Accessions to Department Library, Jan.–Mar., 1901.   | Apr., 1901.               |
|    | n. t. p. 29 leaves.  |                           |
| 36 | No. 36. Accessions to Department Library, Apr.–June, 1901.   | 1901. n. t. p. 24 leaves. |
| 37 | No. 37. Catalogue of periodicals and other serial publications, exclusive of U. S. Government publications, in Library of Department of Agriculture. 1901. | 362 pp.                   |
| 38 | No. 38. Accessions to Department Library, July–Sept., 1901.  | n. t. p. 35 pp.           |
| 39 | No. 39. Accessions to Department Library, Oct.–Dec., 1901.   | n. t. p. 24 pp.           |

**Tables**Classifica-  
tion no.**A17. LIBRARY—Continued****A17.3: Bulletins—Continued**

- 40 No. 40. Accessions to Department Library, Jan.—Mar., 1902. 1902. 67 pp.  
 41 No. 41. List of references to publications relating to irrigation and land  
 drainage; compiled by Ellen A. Hedrick. 1902. 181 pp.  
 42 No. 42. Catalogue of publications relating to botany in library of U. S.  
 Department of Agriculture. 1902. 242 pp.  
 43 No. 43. Accessions to Department Library, April–June, 1902. 1902.  
 37 pp.  
 44 No. 44. Accessions to Department Library, July–Sept., 1902. 1902.  
 51 pp.

**A17.4: Circulars**

None issued.

**A17.5: List of duplicates offered as exchanges**

- 1 1. Dec., 1901. n. t. p. 3 pp.  
 2 2. Jan., 1902. n. t. p. 4 pp.

**A18. MICROSCOPY DIVISION**

[Division organized in 1885; abolished in 1895.]

**A18.1: Annual reports****MICROSCOPIC INVESTIGATIONS: REPORT OF MICROSCOPIST**

1872 (Taylor). (In A1.1:872, p. 188.)

1873 (Taylor). (In A1.1:873, p. 183.)

1874 (Taylor). (In A1.1:874, p. 161.)

1875 (Taylor). (In A1.1:875, p. 187.)

1876 (Taylor). (In A1.1:876, p. 74.)

1877 to 1884, no reports printed.

**REPORT OF MICROSCOPIST (MICROSCOPY DIVISION)**

1885 (Taylor). (In A1.1:885, p. 89.)

1886 (Taylor). (In A1.1:886, p. 139.)

1887 (Taylor). (In A1.1:887, p. 617.)

1888 (Taylor). (In A1.1:888, p. 559.)

889 1889 (Taylor), [1]+191–200 pp. 13 pl. (Also in A1.1:889, p. 191.)

890 1890 (Taylor), [1]+361–374 pp. 11 pl. (Also in A1.1:890, p. 361.)

891 1891 (Taylor), [1]+405–416 pp. 9 pl. (Also in A1.1:891, p. 405.)

892 1892 (Taylor), [1]+281–292 pp. 9 pl. (Also in A1.1:892, p. 281.)

**CHIEF OF DIVISION OF MICROSCOPY**

893 1893 (Taylor), iii+297–302 pp. 7 pl. (Also in A1.1:893, p. 297.)

1894 (Taylor). (In A1.1:894, p. 195.)

**A18.2: General publications**

F44 Fibrine and bacteria; by T. Taylor. n. d. 5 pp.\*

M58 Microtome. Letter of C. P. Lyman to Dr. Thomas Taylor on the work of  
 his microtome. Sept. 30, 1881.\*N16 Naphthaline as an insecticide, etc., its effect on seeds, plants, and ani-  
 mals; by T. Taylor. 1883. 6 pp.**A18.3: Bulletins**

None issued.

**A18.4: Circulars**

None issued.

**A18.5: Food products**

- 1<sup>1</sup> No. 1. Twelve edible mushrooms of U. S., with directions for their iden-  
 tification and their preparation as food; by Thomas Taylor.  
 (Reprinted from report Commissioner of Agriculture for 1885.)  
 1893. 20 pp. 1 pl.

- 1<sup>2</sup> Same, [reprinted with addition of article on mushroom industry  
 (Falconer).] 1894. 23 pp. 1 pl.

\* No copy found.

Classifica-  
tion no.**A18. MICROSCOPY DIVISION—Continued****A18.5: Food products—Continued**

- 2<sup>1</sup> No. 2. Eight edible and twelve poisonous mushrooms of U. S., with directions for culture and culinary preparation of the edible species; by Thomas Taylor. (Reprinted from report of Secretary of Agriculture, 1890, pp. 366-373, with appendix: List of edible fungi of U. S.) 1891. 16 pp. 5 pl.
- 2<sup>2</sup> Same, 2d rev. ed. [2d ed. rev.]. 1893. 23 pp. 6 pl.
- 3 No. 3. Improved methods of distinguishing between pure and fictitious lard [and] Four edible mushrooms of U. S.; by Thomas Taylor. (Reprinted, with revision, from report of Secretary of Agriculture for 1891.) 1893. 22 pp. 6 pl.

**A19. PLANT INDUSTRY BUREAU**

[The Bureau of Plant Industry was organized July 1, 1901, by the consolidation of the following divisions of the Department, viz: Agrostology Division, *see* A3; Botany Division, *see* A6; Gardens and Grounds Division, *see* A14; Pomology Division, *see* A20; Seed and Plant Introduction, *see* A23; Seed Division, *see* A24; Vegetable Physiology and Pathology Division, *see* A28. Also Arlington Experimental Farm and Tea Investigations and Experiments Office.]

**A19.1: Annual reports**

- 901 1901 (Galloway), iii+43-94 pp. (Also in A1.1:901, p. 43.)
- 902 1902 (Galloway), iv+47-108 pp. (Also in A1.1:902, p. 108.)

**A19.2: General publications**

- F74 Forage crop seed. Plan of distributing forage crop seed and cultural directions for crops distributed. [1902.] n. t. p. 8 pp. 16°
- P98 Publications. List of publications of Office of Grass and Forage Plant Investigations and Division of Agrostology; by W. J. Spillman. 1902. 12 pp.
- T55 Tobacco seed. Plan of distributing tobacco seed and cultural directions for different types of tobacco distributed. [1902.] n. t. p. 15 pp. 16°

**A19.3: Bulletins (large 8°)**

- 1<sup>1</sup> No. 1. Relation of lime and magnesia to plant growth; 1, Liming of soils from physiological standpoint, by Oscar Loew; 2, Experimental study of relation of lime and magnesia to plant growth, by D. W. May. 1901. 53 pp. 3 pl.
- 1<sup>2</sup> Same, corrected. 1901. 53 pp. 3 pl.
- 2 No. 2. Spermatogenesis and fecundation of zamia; by Herbert J. Webber. 1901. 100 pp. 7 pl.
- 3 No. 3. Macaroni wheats; by Mark Alfred Carleton. 1901. 62 pp. 11 pl.
- 4 No. 4. Range improvement in Arizona; by David Griffiths. 1901. 31 pp. 6 pl.
- 5 No. 5. Seeds and plants imported, inventory no. 9, numbers 4351-5500. 1902. 79 pp.  
See for inventories 1-8, A7.6:1-8.
- 6 No. 6. List of American varieties of peppers; by W. W. Tracy, jr. 1902. 19 pp.
- 7 No. 7. Algerian durum wheats, classified list, with descriptions; by Carl S. Scofield. 1902. 48 pp. 18 pl.
- 8 No. 8. Collection of economic and other fungi prepared for distribution; by Flora W. Patterson. 1902. 31 pp.
- 9 No. 9. North American species of *Spartina*; by Elmer D. Merrill. 1902. 16 pp.
- 10 No. 10. Records of seed distribution and cooperative experiments with grasses and forage plants; by F. Lamson-Scribner. 1902. 23 pp.
- 11 No. 11. Johnson grass, report of investigations made during season of 1901; by Carleton R. Ball. 1902. 24 pp. 1 pl.
- 12 No. 12. Stock ranges of northwestern California, notes on grasses and forage plants and range conditions; by Joseph Burt Davy. 1902. 81 pp. 8 pl. 3 maps.

## Tables

Classifica-  
tion no.

## A19. PLANT INDUSTRY BUREAU—Continued

### A19.3: Bulletins—Continued

- |    |  |
|----|--|
| 13 | No. 13. Experiments in range improvement in Central Texas; by H. L. Bentley. 1902. 72 pp. 2 pl.  |
| 14 | No. 14. Decay of timber and methods of preventing it; by Hermann von Schrenk. 1902. 96 pp. 18 pl.  |
| 15 | No. 15. Forage conditions on northern border of Great Basin, being report upon investigations made during July and August, 1901, in region between Winnemucca, Nev., and Ontario, Oregon; by David Griffiths. 1902. 60 pp. 16 pl. 1 map. |
| 16 | No. 16. Preliminary study of germination of spores of <i>Agaricus campestris</i> and other basidiomycetous fungi; by Margaret C. Ferguson. 1902. 43 pp. 3 pl.  |
| 17 | No. 17. Some diseases of the cowpea; 1, Wilt disease and its control, by W. A. Orton; 2, Cowpea resistant to root-knot, by Herbert J. Webber and W. A. Orton. 1902. 38 pp. 6 pl.   |
| 18 | No. 18. Observations on mosaic disease of tobacco; by Albert F. Woods. May 15, 1902. 24 pp. 6 pl.  |
| 19 | No. 19. Kentucky bluegrass seed, harvesting, curing, and cleaning; by A. J. Pieters and Edgar Brown. 1902. 19 pp. 6 pl.  |
| 20 | No. 20. Manufacture of semolina and macaroni; by Robert P. Skinner. 1902. 31 pp. 5 pl.   |
|    | No. 21. Not issued 1902.   |
| 22 | No. 22. Injurious effects of premature pollination, with general notes on artificial pollination and setting of fruit without pollination; by Charles P. Hartley. 1902. 48 pp. 4 pl.   |
| 23 | No. 23. Berseem, the great forage and soiling crop of Nile Valley; by David G. Fairchild. 1902. 20 pp. 14 pl.  |
| 24 | No. 24. Manufacture and preservation of unfermented grape must; by George C. Husmann. 1902. 19 pp. 1 pl.   |
|    | No. 25. Not issued 1902; see for advance issue A19.3a:R31.   |
| 26 | No. 26. Spanish almonds and their introduction into America; by David G. Fairchild. 1902. 16 pp. 8 pl.   |
|    | Nos. 27-29, not issued 1902.   |
| 30 | No. 30. Budding the pecan; by George W. Oliver. 1902. 20 pp. 8 pl.   |
| 31 | No. 31. Cultivated forage crops of Northwestern States; by A. S. Hitchcock. 1902. 28 pp. 7 pl.   |

### A19.3a: Bulletins (separates)

- |     |  |
|-----|--|
| R31 | Rescue grass. Seeds of rescue grass and chess; by F. H. Hillman. 1902. [1]+4 pp.<br>[Advance issue of portion of Bulletin no. 25.] |
|-----|--|

### A19.4: Circulars

None issued.

### A19.5: Novelties and specialties, Distribution of (16°)

- |    |                            |
|----|----------------------------|
| 1  | Section 1. n. t. p. 4 pp.  |
| 2  | Section 2. n. t. p. 4 pp.  |
| 3  | Section 3. n. t. p. 4 pp.  |
| 4  | Section 4. n. t. p. 4 pp.  |
| 5  | Section 5. n. t. p. 4 pp.  |
| 5a | Section 5a. n. t. p. 4 pp. |
| 6  | Section 6. n. t. p. 4 pp.  |
| 6a | Section 6a. n. t. p. 4 pp. |

## A20. POMOLOGY DIVISION

[Merged into Bureau of Plant Industry, July 1, 1901, see A19. For historical sketch of Division, see Yearbook, 1897 (A1.10:897), p. 111.]

### A20.1: Annual reports

- |                      |   |
|----------------------|---|
| REPORT OF POMOLOGIST |   |
| 887                  | 1886 (Van Deman). (In A1.1:886, p. 259.)                            |
|                      | 1887 (Van Deman), [1]+627-652 pp. 9 pl. (Also in A1.1:887, p. 627.) |
|                      | 1888 (Van Deman). (In A1.1:888, p. 565.)                            |

Classifica-  
tion no.**A20. POMOLOGY DIVISION—Continued****A20.1: Annual reports—Continued****REPORT OF POMOLOGIST—Continued**

- 889 1889 (Van Deman), [1]+433-452 pp. 10 pl. (Also in A1.1:889, p. 433.)  
 890 1890 (Van Deman), [1]+409-424 pp. 9 pl. (Also in A1.1:890, p. 409.)  
 891 1891 (Van Deman), [1]+379-404 pp. 11 pl. [Plate 11 is erroneously  
 numbered "9."] (Also in A1.1:891, p. 379.)  
 892 1892 (Van Deman), [1]+247-280 pp. 13 pl. (Also in A1.1:892, p. 247.)

**REPORT OF ASSISTANT POMOLOGIST**

- 893 1893 (Taylor), iii+277-296 pp. 9 pl. (Also in A1.1:893, p. 277.)

**REPORT OF POMOLOGIST**

- 894 1894 (Heiges), 62 pp. 4 pl. (Exec. report in A1.1:894, p. 205.)  
 895 1895 (Heiges), 64 pp. 6 pl. (Exec. report in A1.1:895, p. 191.)  
 896 1896 (Heiges), iii+109-114 pp. (Also in A1.1:896, p. 109.)  
 897 1897 (Brackett), ii+147-151 pp. (Also in A1.1:897, p. 147.)  
 898 1898 (Brackett), iii+127-131 pp. (Also in A1.1:898, p. 127.)  
 899 1899 (Brackett), iii+85-90 pp. (Also in A1.1:899, p. 85.)

**REPORT OF ACTING POMOLOGIST**

- 900 1900 (Taylor), ii+59-63 pp. (Also in A1.1:900, p. 59.)  
 901 1901 (Brackett). [This final report of the Division was made through the  
 chief of Bureau of Plant Industry, forming part of his annual report  
 for 1901. (See A1.1:901, p. 75; also, A19.1:901, p. 75.)]

**A20.2: General publications**

[Publications which originated in this Division, but which were published in a num-  
 bered series of the Secretary's Office or some other division of the Department,  
 are entered only where such numbering places them, with references under the  
 proper headings in the index to this work. Publications of the Division issued  
 only as Congressional documents are noted in chronological order in the Appen-  
 dix to this work.]

- N95 Nut culture in U. S., embracing native and introduced species; [com-  
 piled by W. P. Corsa]. 1896. 144 pp. 16 pl. large 8°

**A20.3: Bulletins**

- 1<sup>1</sup> No. 1. Report on condition of tropical and semitropical fruits in United  
 States in 1887, prepared under direction of Commissioner of Agri-  
 culture; Tropical and semitropical fruits in Florida and Gulf States,  
 by P. W. Reasoner; Tropical and semitropical fruits of California,  
 Arizona, and New Mexico, by W. G. Klee. 1888. 149 pp. 3 pl.  
 1<sup>2</sup> Same, [2d ed.]. 1891. 149 pp.  
 2 No. 2. Adaptation of Russian and other fruits to extreme northern por-  
 tions of United States; [by T. T. Lyon]. 1888. 64 pp.  
 ✓ 3 No. 3. Classification and generic synopsis of wild grapes of North America;  
 by T. V. Munson. 1890. 14 pp.  
 4 No. 4. Relative merit of various stocks for orange, with notes on mal di  
 goma and mutual influence of stock and scion; [compiled by Wil-  
 liam R. King]. 1891. 21 pp.  
 5 No. 5. Fig culture; edible figs, their culture and curing, by Gustav Eisen;  
 Fig culture in Gulf States, by Frank S. Earle. 1897. 32 pp.  
 6 No. 6. Catalogue of fruits recommended for cultivation in various sections  
 of U. S., by American Pomological Society; revised by committee  
 of society, T. T. Lyon, chairman. 1897. 39 pp.  
 7 No. 7. Fruit industry and substitution of domestic for foreign-grown  
 fruits, with historical and descriptive notes on ten varieties of  
 apple suitable for export trade; by William A. Taylor. 1898.  
 vii+305-362 pp. 5 pl.  
 [Reprint from Yearbook for 1897.]  
 8 No. 8. Revised catalogue of fruits recommended for cultivation in various  
 sections of U. S. and British provinces, by American Pomological  
 Society; revised by committee of society, W. H. Ragan, chairman.  
 1899. 63 pp. 1 pl.  
 9 No. 9. Fig, its history, culture, and curing, with descriptive catalogue of  
 known varieties of figs; by Gustav Eisen. 1901. 317 pp. 16 pl.  
 10 No. 10. Prunes and prune culture in Western Europe, with special refer-  
 ence to existing conditions in Pacific Northwest; by Edward R.  
 Lake. 1901. 23 pp. 10 pl.

**Tables**Classifica-  
tion no.**A20. POMOLOGY DIVISION—Continued****A20.4: Circulars**

[Reprinted from Report of Pomologist for 1894.]

- 1 No. 1. Nut culture; by H. M. Engle. August 18, 1896. n. t. p. 4 pp.  
 2<sup>1</sup> No. 2. Prune culture in Pacific Northwest; by E. R. Lake. n. d. n. t. p.  
     7 pp.  
 2<sup>2</sup> Same, revised Nov. 20, 1897. n. t. p. 7 pp.  
 3<sup>1</sup> No. 3. Notes on peach culture; by J. H. Hale. n. d. n. t. p. 10 pp.  
 3<sup>2</sup> Same, revised Nov. 20, 1897. [Erroneously numbered 40.] n. t. p.  
     8 pp.  
 3<sup>3</sup> Same [with correct number.] n. t. p. 8 pp.

**A21. PUBLICATIONS DIVISION**

[Formerly Division of Records and Editing.]

**A21.1: Annual reports****REPORT OF EDITOR**

- 1868 (Dodge). (In A1.1:868, p. 190.)  
 1869 (Dodge). (In A1.1:869, p. 157.)  
 1870 (Dodge). (In A1.1:870, p. 153.)  
 1871 (Dodge). (In A1.1:871, p. 123.)  
 1872 to 1888 no reports printed.  
 1889 Report of Secretary relative to establishment and work of the  
     division. 3 pp. (Also in A1.1:889, p. 10.)

**REPORT OF CHIEF OF DIVISION OF RECORDS AND EDITING**

- 890 1890 (Hill), [1]+437-447 pp. (Also in A1.1:890, p. 437.)  
 891 1891 (Hill), [1]+489-498 pp. (Also in A1.1:891, p. 489.)  
 892 1892 (Hill), [1]+497-508 pp. (Also in A1.1:892, p. 497.)  
 893 1893 (Hill), iii+395-408 pp. (Also in A1.1:893, p. 395.)  
 894 1894 (Hill), iii+171-184 pp. (Also in A1.1:894, p. 171.)

**REPORT OF CHIEF OF DIVISION OF PUBLICATIONS**

- 895 1895 (Hill), iii+221-244 pp. (Also in A1.1:895, p. 221.)  
 896 1896 (Hill), iv+29-76 pp. (Also in A1.1:896, p. 29.)  
 897 1897 (Hill), iv+25-91 pp. (Also in A1.1:897, p. 25.)  
 898 1898 (Hill), iv+43-86 pp. (Also in A1.1:898, p. 43.)

**REPORT OF EDITOR**

- 899 1899 (Hill), iv+161-211 pp. (Also in A1.1:899, p. 161.)  
 900 1900 (Hill), iii+113-164 pp. (Also in A1.1:900, p. 113.)  
 901 1901 (Hill), iii+271-324 pp. (Also in A1.1:901, p. 271.)  
 902 1902 (Hill), iii+317-376 pp. (Also in A1.1:902, p. 317.)

**A21.2: General publications**

- Ag8 Agriculture Department. Department of Agriculture and its work; by  
     George William Hill. Aug. 6, 1898. n. t. p. 12 pp.  
 At6 Atlanta, Ga. Organization of U. S. Department of Agriculture and list of  
     its exhibits at Cotton States and International Exposition, Atlanta,  
     Ga., Sept. 8, 1895, to Jan. 1, 1896. 1895. 14 pp. 4 pl. 16°  
 B97 Butter making. Report on recently patented process of butter making;  
     by D. E. Salmon. Nov. 20, 1897. n. t. p. 3 pp.  
 C49<sup>1</sup> Circulars issued by the various divisions of the Department of Agriculture  
     to Nov. 1, 1897. n. p. n. d. 11 pp.  
 C49<sup>2</sup> Circulars of information [issued by the various divisions of Agriculture  
     Department]. n. d. n. t. p. 6 pp.  
 F22<sup>1</sup> Farmers' bulletins [available for distribution]. July 10, 1896. n. t. p.  
     4 pp.  
 F22<sup>2</sup> Same. Oct. 7, 1896. n. t. p. 4 pp.  
 F22<sup>3</sup> Same. Feb. 1, 1897. n. t. p. 4 pp. 4°  
 F22<sup>4</sup> Same. Apr. 1, 1897. n. t. p. 3+[1] pp. 4°  
 F22<sup>5</sup> Same. June 1, 1897. n. t. p. 4 pp. 4°  
 P96<sup>1</sup> Publication work as affected by law of Jan. 12, 1895. Jan. 18, 1897.  
     n. t. p. 4 pp.  
 P96<sup>2</sup> Publications. Notes regarding Department publications. Sept. 19, 1896.  
     (Circ.)



Classifica-  
tion no.**A21. PUBLICATIONS DIVISION—Continued****A21.2: General publications—Continued**

- P96<sup>3</sup> Publications available. Special list of publications available Apr. 10, 1899, for distribution to correspondents and others rendering service to the Department. n. d. n. t. p. 10 pp.
- R29 Reprints. [List of] Congressional reprints for sale by Supt. of Documents. April 30, 1897. n. t. p. 2 pp.

**A21.3: Bulletins**

- 1<sup>1</sup> [No. 1.] Index to annual reports of U. S. Department of Agriculture, 1837 to 1893; [compiled by George F. Thompson]. 1896. 252 pp.
- 1<sup>2</sup> No. 1. Same, [reprint, 1899]. 252 pp.
- 2 No. 2. Synoptical index of reports of Statistician, 1863 to 1894; by Geo. F. Thompson. 1897. 258 pp.
- 3<sup>1</sup> No. 3. Historical sketch of U. S. Department of Agriculture, its objects and present organization; compiled by Charles H. Greathouse. 1898. 74 pp. 3 pl.
- 3<sup>2</sup> Same. Revised edition. 1898. " 74 pp. 3 pl.
- 4 No. 4. Index to authors, with titles of their publications, in documents of U. S. Department of Agriculture, 1841 to 1897; by Geo. F. Thompson. 1898. 303 pp.
- 5 No. 5. Index to literature relating to animal industry in publications of Department of Agriculture, 1837 to 1898; by George Fayette Thompson. 1900. 676 pp.
- 6 No. 6. List by titles of publications of U. S. Department of Agriculture from 1840 to June, 1901, inclusive; compiled and compared with originals by R. B. Handy and Minna A. Cannon. 1902. 216 pp.
- 7 No. 7. Index to yearbooks of U. S. Department of Agriculture, 1894-1900; prepared by Charles H. Greathouse. 1902. 196 pp.

**A21.4: Circulars**

- 1 No. 1. Organization of Dept. of Agriculture, 1901-1902. Oct. 23, 1901. n. t. p. 20 pp.

**A21.5: List of bulletins and circulars available for free distribution. [Publication] no. 247.**

- 1 Corrected to Nov. 1, 1897. 15 pp.
- 2 [Revised.] Corrected to Oct. 1, 1898. 18 pp.
- 3 3d ed. Corrected to June 1, 1899. 20 pp.
- 4 4th ed. Corrected to July 1, 1899. 20 pp.
- 5 5th ed. Corrected to Apr. 1, 1900. 21 pp.
- 6 6th ed. Corrected to Oct. 15, 1900. 24 pp.
- 7 7th ed. Corrected to Jan. 1, 1902. 24 pp.

**A21.6: Monthly list of publications**

[NOTE.—Issued as a one-page circular of various sizes up to March, 1896, when it became a pamphlet of from 3 to 8 pages, without title page, in which form it is still issued.]

- 892 1892. Jan.-Dec.
- 893 1893. Jan.-Dec.
- 894 1894. Jan.-Dec.
- 895 1895. Jan.-Dec.
- 896 1896. Jan.-Dec. [2d ed. of Nov., Jan., and Feb.]
- 897 1897. Jan.-Dec.
- 898 1898. Jan.-Dec. [2d ed. of Aug. and Sept.]
- 899 1899. Jan.-Dec.
- 900 1900. Jan.-Dec.
- 901 1901. Jan.-Dec.
- 902 1902. Jan.-Dec.

**A21.7: Press notices**

[Synoptical notices of publications which are to appear. Distributed in large numbers to the press for copy.]



## Tables

Classification  
no.

## A21. PUBLICATIONS DIVISION—Continued

### A21.8: [Price list of] publications for sale by Superintendent of Documents. [Publication no. 179.]

- |                |   |
|----------------|---|
| 1 <sup>1</sup> | [1st ed.] Feb. 19, 1896. 15 pp.                                 |
| 1 <sup>2</sup> | Same, supp. Aug. 31, 1896. [Erroneously called "Circular" 179.] |
| 2              | [2d ed.] Oct. 1, 1896. n. t. p. 16 pp.                          |
| 3              | [3d ed.] Corrected to Oct. 1, 1897. n. p. n. d. 28 pp.          |
| 4              | [4th ed.] Corrected to July 1, 1898. n. p. n. d. 28 pp.         |
| 5              | 5th ed. Corrected to Feb. 1, 1899. n. p. n. d. 33 pp.           |
| 6              | 6th ed. Corrected to Feb. 1, 1900. n. p. n. d. 37 pp.           |
| 7              | 7th ed. Corrected to July 1, 1900. n. p. n. d. 36 pp.           |
| 8              | 8th ed. Corrected to Aug. 1, 1901. n. p. n. d. 40 pp.           |
| 9              | 9th ed. Corrected to Aug. 1, 1902. 1902. 45 pp.                 |

## A22. PUBLIC-ROAD INQUIRIES OFFICE

[Formerly Office of Road Inquiry. For historical sketch of the Office, see Yearbook, 1897 (A1.10:897). p. 175.]

### A22.1: Annual reports

- |     |   |
|-----|---|
|     | SPECIAL AGENT AND ENGINEER FOR ROAD INQUIRY               |
| 893 | 1893 (Stone), iii+585-592 pp. (Also in A1.1:893, p. 585.) |
|     | 1894 (Stone). (In A1.1:894, p. 217.)                      |
|     | 1895 (Stone). (In A1.1:895, p. 195.)                      |
| 896 | 1896 (Stone), iii+145-149 pp. (Also in A1.1:896, p. 145.) |
|     | DIRECTOR OF OFFICE OF ROAD INQUIRY                        |
| 897 | 1897 (Stone), iii+173-175 pp. (Also in A1.1:897, p. 173.) |
| 898 | 1898 (Dodge), iii+159-162 pp. (Also in A1.1:898, p. 159.) |
|     | DIRECTOR OF OFFICE OF PUBLIC ROAD INQUIRIES               |
| 899 | 1899 (Stone), iii+155-160 pp. (Also in A1.1:899, p. 155.) |
| 900 | 1900 (Dodge), ii+279-291 pp. (Also in A1.1:900, p. 279.)  |
|     | REPORT OF OFFICE OF PUBLIC ROAD INQUIRIES                 |
| 901 | 1901 (Dodge), iii+235-252 pp. (Also in A1.1:901, p. 235.) |
| 902 | 1902 (Dodge), iii+305-316 pp. (Also in A1.1:902, p. 305.) |

### A22.2: General publications

[Publications which originated in this Office, but were published in a numbered series of the Secretary's office, or some other division of the Department, are entered only where such numbering places them, with references under the proper headings in the index to this work. Publications of the office issued only as Congressional documents are noted in chronological order in the Appendix to this work.]

- |                  |   |
|------------------|---|
| Ag8 <sup>1</sup> | Agricultural colleges. [Letter regarding cooperation of Road Inquiry Office with agricultural colleges and experiment stations in disseminating information upon best methods of road-making; by Roy Stone.] Dec. 1, 1896. n. t. p. 3 pp. |
| Ag8 <sup>2</sup> | Same, [reprint. 1897.] n. t. p. 3 pp.   |
| B86              | Buffalo, N. Y. [Letter of invitation inclosing call for an International Good Roads Congress, to be held at Buffalo, N. Y., Sept. 16-21, 1901.] Aug. 5, 1901. 2 l.  |
| C38 <sup>1</sup> | Charlottesville, Va. [Letter of invitation to attend Jefferson Memorial and Interstate Good Roads Convention to be held at Charlottesville, Va., Apr. 2-4, 1902.] Mar. 3, 1902. (Circ.)   |
| C38 <sup>2</sup> | Same, inclosure, official invitation. [3] pp.   |
| C43              | Chicago, Ill. Letter of invitation to attend National Good Roads and Irrigation congresses, to be held at Chicago, Ill., Nov. 19-24, 1900. Oct. 25, 1900. (Circ.)   |
| Ed8              | Education. Correspondence with Commissioner of Education. June 2, 1896. (Circ.)   |
| L11              | Laboratory for physical and chemical examination of road materials. n. d. (Circ.)   |
| L56 <sup>1</sup> | Letter to accompany Circular No. 17. June 1, 1896. n. d. (Circ.)  |
| L56 <sup>2</sup> | Letter to accompany correspondence and documents. June 12, 1896. n. d. (Circ.)  |
| N21              | National Road Parliament. [Notice of meeting of National Road Parliament.] Sept. 15, 1898. (Circ.)  |
| P96 <sup>1</sup> | Publications of Office of Road Inquiry. [1896.] (Circ.)   |

Classifica-  
tion no.**A22. PUBLIC-ROAD INQUIRIES OFFICE—Continued****A22.2: General publications—Continued**

- P96<sup>2</sup> Publications of Office of Road Inquiry. [1897.] n. t. p. 6 pp.\*  
 P96<sup>3</sup> Same, and addenda. [1899.] n. t. p. 6 pp.  
 P96<sup>4</sup> Same. [1899.] n. t. p. 7 pp.  
 P96<sup>5</sup> Same, corrected to Apr. 2, 1900. n. t. p. 8 pp.  
 P96<sup>6</sup> Same, corrected to Sept., 1901. 8 pp.  
 R31 [Resumption of office and general inquiries.] Feb. 6, 1899. (Circ.)

**A22.3: Bulletins**

- 1 No. 1. State laws relating to management of roads, enacted in 1888-93; compiled by Roy Stone. 1894. 95 pp.
- 2 No. 2. Proceedings of Minnesota Good Roads Convention, held at St. Paul, Minn., Jan. 25, 26, 1894. 1894. 16 pp.
- 3 No. 3. Improvement of road system of Georgia; by O. H. Sheffield. 1894. 31 pp.
- 4 No. 4. Road-making materials in Arkansas; by John C. Branner. 1894. 11 pp.
- 5 No. 5. Information regarding road materials and transportation rates in certain States west of Mississippi River; furnished by officials of various railway companies. 1894. 24 pp.
- 6 No. 6. Information regarding roads, road materials, and freight rates in certain States north of Ohio River; furnished by officials of various railway companies. 1894. 30 pp.
- 7 No. 7. Information regarding roads and road-making materials in certain Eastern and Southern States; furnished by officials of various railway companies. 1894. 29 pp.
- 8 No. 8. Earth roads, hints on their construction and repair; compiled by Roy Stone. 1894. 20 pp.
- 9 No. 9. State aid to road building in New Jersey; by Edward Burrough. 1894. 20 pp.
- 10 No. 10. Proceedings of National Road Conference, Asbury Park, July 5, 6, 1894. 1894. 63 pp.
- 11 No. 11. Proceedings of Virginia Good Roads Convention, Richmond, Va., Oct. 18, 1894. 1895. 62 pp.
- 12 No. 12. Wide tires, laws of certain States relating to their use, and other pertinent information; compiled by Roy Stone. 1895. 16 pp.
- 13 No. 13. Kentucky highways, history of old and new systems; by M. H. Crump. 1895. 24 pp.
- 14 No. 14. Good roads, extracts from messages of governors; compiled by Roy Stone. 1895. 24 pp.
- 15 No. 15. Proceedings of Good Roads Convention of Texas, Houston, Tex., Feb. 19, 1895. 1895. 24 pp.
- 16<sup>1</sup> No. 16. Notes on employment of convicts in connection with road building; compiled by Roy Stone. 1895. 15 pp.
- 16<sup>2</sup> Same, revised edition. 1898. 21 pp.
- 17 No. 17. Historical and technical papers on road building in United States. 1895. 52 pp.
- 18<sup>1</sup> No. 18. State laws relating to management of roads enacted in 1894-1895; compiled by Roy Stone. 1895. 86 pp.  
[Continuation of Bull. 1.]
- 18<sup>2</sup> Same, Supplement. 1895. v+87-124 pp.
- 19 No. 19. Progress of road construction in United States; reports by delegates to National Road Parliament, Atlanta, Ga., Oct. 17-19, 1895. 1897. 47 pp.
- 20 No. 20. Traction tests; by Samuel T. Neely. 1896. 22 pp. 2 pl.
- 21 No. 21. Proceedings of International Good Roads Congress, held at Buffalo, N. Y., Sept. 16-21, 1901. 1901. 100 pp.
- 22 No. 22. Proceedings of 3d Annual Good Roads Convention of Boards of Supervisors of State of New York, held at Albany, N. Y., Jan. 28 and 29, 1902. 1902. 63 pp. 13 pl.
- 23 No. 23. Road conventions in Southern States and object-lesson roads constructed under supervision of Office of Public Road Inquiries, with cooperation of Southern Railway. 1902. 89 pp. 11 pl.

\* No copy found.

## Tables

Classification  
no.

## A22. PUBLIC-ROAD INQUIRIES OFFICE—Continued

### A22.3: Bulletins—Continued

- 25 No. 24. Not issued 1902.  
No. 25. Proceedings of Jefferson Memorial and Interstate Good Roads Convention, held at Charlottesville, Va., Apr. 2-4, 1902. 1902. 60 pp. 5 pl.

### A22.4: Circulars

- 1 No. 1. Circular letter to the governors of States and Territories requesting cooperation with Office of Road Inquiry.\*  
2 No. 2. Same, to the secretaries of state.\*  
3 No. 3. Same, to the members of Congress.\*  
4 No. 4. Same, to the State geologists.\*  
5 No. 5. Same, to the railroad presidents.\*  
6 No. 6. General circular of inquiry.\*  
7 No. 7. Request for information, etc.\*  
8 No. 8. Same.\*  
9 No. 9. Circular relating to road conference at Asbury Park, N. J.\*  
10 No. 10. Circular of a temporary character. [Copy not preserved by office.]\*  
11 No. 11. Same.\*  
12 No. 12. Circular addressed to the statistical correspondents of the office.\*  
13 No. 13. List of Publications of the Office of Road Inquiry.\*  
14 No. 14. Addresses on road improvement; by Roy Stone. 1894. n. t. p. 15 pp.  
15 No. 15. Act to provide for construction of roads by local assessment, county and State aid, passed by New York Assembly. Oct. 31, 1894. n. t. p. 3 pp.  
16 No. 16. Highway taxation, comparative results of labor and money systems. Nov. 9, 1894. n. t. p. 5 pp.  
[For revision, see no. 24.]  
17 No. 17. Origin and work of Darlington Road League. Sept. 25, 1895. 6 pp.  
18<sup>1</sup> No. 18. Report of Committee on Legislation adopted by State Good Roads Convention, Richmond, Va., Oct. 10, 11, 1895. Oct. 29, 1895. 6 pp.  
18<sup>2</sup> Same, Nov. 10, 1895. 6 pp.  
19 No. 19. Traffic of country roads. Apr. 4, 1896. 4 pp.  
20 No. 20. Comments on systems of maintaining country roads. May 1, 1896. 7 pp.  
[For revision, see revised ed. no. 24.]  
21 No. 21. Methods of constructing macadamized roads. June 6, 1896. 12 pp.  
22 No. 22. [Appeal for organization of State and local road-improvement societies]; by C. A. Locke. June 25, 1896. 3 pp.  
23 No. 23. Money value of good roads to farmers; by W. C. Latta. July 15, 1896. 4 pp.  
24<sup>1</sup> No. 24. Highway repairing. 1896. 12 pp.  
24<sup>2</sup> No. 24. Revision of nos. 16, 20, 24, Highway maintenance and repairs. Dec. 15, 1897. 16 pp.  
25 No. 25. Brick paving for country roads. Dec. 16, 1896. 7 pp.  
26 No. 26. Going in debt for good roads; address of Judge Thayer. Jan. 16, 1897. 6 pp.  
27 No. 27. Cost of hauling farm products to market or to shipping points in European countries; reports from consuls. Feb. 5, 1897. 12 pp.  
28 No. 28. Addresses on road improvement in Maine, New York, North Carolina, and Illinois; by Roy Stone. Mar. 2, 1897. 26 pp.  
29 No. 29. Forces which operate to destroy roads, with notes on road stones and problems therewith connected; by C. L. Whittle. Mar. 13, 1897. 14 pp. 4 pl.  
30 No. 30. Repairs of macadam roads; by E. G. Harrison. Mar. 1, 1898. 14 pp.  
31 No. 31. Must farmer pay for good roads? by Otto Dorner. [n. d.] 40 pp. 16°

[This number was duplicated by assigning it to "State aid to road building in Minnesota," but a new edition of that circular was issued bearing its proper number, which is no. 32].

\* No copy found.

Classification  
no.

## A22. PUBLIC-ROAD INQUIRIES OFFICE—Continued

### A22.4: Circulars—Continued

- 32<sup>1</sup> [No. 32.] State aid to road building in Minnesota; by A. B. Choate. July 23, 1898. 12 pp.  
[Erroneously numbered 31.]
- 32<sup>2</sup> No. 32. Same, [reprint with correct number]. 12 pp.
- 33 No. 33. Road improvement in governors' messages. May 1, 1899. 14 pp.
- 34 No. 34. Social, commercial, and economic phases of road subject; by W. H. Moore. Mar. 29, 1900. 8 pp.
- 35 No. 35. [Higbie-Armstrong road improvement act]. May 16, 1900. 15 pp.
- 36<sup>1</sup> No. 36. List of national, state, and local road associations and kindred organizations in U. S. Jan. 20, 1902. n. t. p. 13 pp.
- 36<sup>2</sup> Same, revised. May 1, 1902. n. t. p. 14 pp.

## A23. SEED AND PLANT INTRODUCTION

[Separated from Division of Botany and made independent publishing office about Jan. 1, 1901.  
Merged into Plant Industry Bureau July 1, 1901. See A19.]

### A23.1: Annual reports

None issued.

### A23.2: General publications

None issued.

### A23.3: Bulletins

None issued.

### A23.4: Circulars

- 1 No. 1. Best horse-radish varieties of Europe, and methods of cultivation; by David G. Fairchild. Dec. 24, 1900. n. t. p. 8 pp.
- 2 No. 2. Cultivation of Znaim cucumbers; by David G. Fairchild. Jan. 10, 1901. 8 pp.

### A23.5: Inventories

See A6.6:1-8.

See for Inventory no. 9, A19.3:5.

## A24. SEED DIVISION

[Merged into Bureau of Plant Industry, July 1, 1901. See A19.]

### A24.1: Annual reports

- 1868 (Dean). (In A1.1:868, p. 125.)
- 1869 No report issued.
- 1870 (Dean). (In A1.1:870, p. 155.)
- 1871 (Dean). (In A1.1:871, p. 125.)
- 1872 (Dean). (In A1.1:872, p. 407.)
- 1873 (Dean). (In A1.1:873, p. 210.)
- 1874 (Dean). (In A1.1:874, p. 179.)
- 1875 (Dean). (In A1.1:875, p. 359.)
- 1876 to 1878, no report issued.
- 1879 (Dean). (In A1.1:879, p. 484.)
- 1880 to 1884, no report issued.
- 1885 (King). (In A1.1:885, p. 47.)
- 1886 (King). (In A1.1:886, p. 47.)
- 1887 (King). (In A1.1:887, p. 653.)
- 1888 (King). (In A1.1:888, p. 643.)
- 1889 (Longley). (In A1.1:889, p. 477.)
- 1890 (Peck). (In A1.1:890, p. 425.)
- 1891 (Peck). (In A1.1:891, p. 451.)
- 1892 (Peck). (In A1.1:892, p. 471.)
- 893 1893 (Fegan) (calendar year) iii+389-392 pp.  
(Also in A1.1:893, p. 389.)
- 1894 (Fegan). (In A1.1:894, p. 187.)

**Tables**Classifica-  
tion no.**A24. SEED DIVISION—Continued****A24.1: Annual reports—Continued**

- 896 1895 (Fegan) July, 1894—Oct. 1895. (In A1.1:895, p. 201.)  
 1896 (Ashton) Oct. 1, 1895—June 30, 1896. iii+151-154 pp.  
 (Also in A1.1:896, p. 151.)  
 1897-1900 none issued.

**A24.2: General publications**

None issued.

**A24.3: Bulletins**

None issued.

**A24.4: Circulars**

None issued.

**A24.5: Special agent for seed distribution, annual reports of**

- 894 1894 (Harnden), [1]+211-213 pp. (Also in A1.1:894, p. 211.)  
 1895 (Harnden). (In A1.1:895, p. 213.)  
 896 1896 (Harnden), [1]+155-237 pp. (Also in A1.1:896, p. 155.)  
 1897 (Harnden). (In A1.1:897, p. 181.)  
 1898 (Brigham). (In A1.1:898, p. 1.)  
 1899 (Brigham). (In A1.1:899, p. 3.)  
 1900 (Brigham). (In A1.1:900, p. 7.)

**A25. SILK SECTION**

[Discontinued June 30, 1891. By order of Oct. 28, 1889, this section was severed from the Division of Entomology, with which it had been connected since the beginning of the period of regular appropriations made by Congress in 1884.]

**A25.1: Annual reports**

- 889 1889 (Walker), [1]+453-476 pp. (Also in A1.1:889, p. 453.)  
 890 1890 (Walker), [1]+265-276 pp., 6 pl. (Also in A1.1:890, p. 265.)

**A25.2: General publications**

None issued.

**A25.3: Bulletins**

- 1 No. 1. How to raise silkworms, a brief manual of instructions abridged from Bulletin no. 9 of Division of Entomology; by Philip Walker. 1890. 16 pp.

**A25.4: Circulars**

None issued.

**A26. SOILS BUREAU**

[Formerly Division of Soils. For historical sketch of Bureau, see Yearbook, 1897 (A1.10:897), p. 122.]

**A26.1: Annual reports**

- CHIEF OF DIVISION OF AGRICULTURAL SOILS  
 1894 (Whitney). (In A1.1:894, p. 199.)  
 1895 (Whitney). (In A1.1:895, p. 179.)  
 896 1896 (Whitney), iii+239-242 pp. (Also in A1.1:896, p. 239.)  
 CHIEF OF DIVISION OF SOILS  
 897 1897 (Whitney), ii+153-157 pp. (Also in A1.1:897, p. 153.)  
 898 1898 (Whitney), iii+133-142 pp. (Also in A1.1:898, p. 133.)  
 899 1899 (Whitney), iii+101-111 pp. (Also in A1.1:899, p. 101.)  
 900 1900 (Whitney), iii+67-83 pp. (Also in A1.1:900, p. 65.)  
 901 1901 (Whitney), iii+113-140 pp. (Also in A1.1:901, p. 113.)

[Though the title-page of the 1901 report reads, "Division of Soils," the heading of the letter of transmittal reads correctly "Bureau of Soils."]

- CHIEF OF BUREAU OF SOILS  
 902 1902 (Whitney), iv+155-188 pp. (Also in A1.1:902, p. 155.)

Classification  
no.

**A26. SOILS BUREAU—Continued**

**A26.2: General publications**

- F45 Field parties. Instructions to field parties and descriptions of soil types. Field season 1902. n. d. 73 pp.
- T55 Tobacco. Catalogue of Connecticut shade-grown tobacco, Sumatra and Havana seed wrappers, grown under direction of Department of Agriculture during season of 1901, and packed in Sumatra and Cuban packages, to be sold at public auction May 1, 1902, at Hartford, Conn., for account of growers who have cooperated with Department. 1902. 26 pp. 4°
- T99 Types. List of soil types established by Division of Soils in 1899 and 1900, with brief description. Mar. 1, 1901. n. t. p. 11 pp.

**A26.3: Bulletins**

- 1 No. 1. Soil moisture, a record of amount of water contained in soils, during May, 1895. 16 pp.
- 2 No. 2. Same, June, 1895. 16 pp.
- 3 No. 3. Same, July, 1895. 23 pp.
- 4 No. 4. Methods of mechanical analysis of soils and of determination of amount of moisture in soils in field. 1896. 24 pp.
- 5 No. 5. Texture of some important soil formations. 1896. 23 pp. 35 pl.
- 6 No. 6. An electrical method of determining moisture content of arable soils; by Milton Whitney, Frank D. Gardner, and Lyman J. Briggs. 1897. 26 pp.
- 7 No. 7. An electrical method of determining temperature of soils; by Milton Whitney and Lyman J. Briggs. 1897. 15 pp.
- 8 No. 8. An electrical method of determining soluble salt content of soils, with some results of investigations on effect of water and soluble salts on electrical resistance of soils; by Milton Whitney and Thos. H. Means. 1897. 30 pp.
- 9 No. 9. Soil moisture: record of amount of water contained in soils during crop season of 1896; by Milton Whitney and Ralph S. Hosmer. 1897. 23 pp.
- 10 No. 10. Mechanics of soil moisture; by Lyman J. Briggs. 1897. 24 pp.
- 11 No. 11. Tobacco soils of United States, a preliminary report upon soils of principal tobacco districts; by Milton Whitney. 1898. 47 pp. 13 pl.
- 12 No. 12. Electrical method of moisture determination in soils, results and modifications in 1897; by Frank D. Gardner. 1898. 24 pp. 3 pl.
- 13 No. 13. Preliminary report on soils of Florida; by Milton Whitney. 1898. 31 pp. 6 pl.
- 14 No. 14. Alkali soils of Yellowstone Valley, from preliminary investigation of soils near Billings, Mont.; by Milton Whitney and Thos. H. Means. 1898. 39 pp. 17 pl.
- 15 No. 15. Electrical instruments for determining moisture, temperature, and soluble salt content of soils; by Lyman J. Briggs. 1899. 35 pp.
- 16 No. 16. Catalogue of first 4,000 samples in soil collection of Division of Soils; by Milton Whitney. 1899. 145 pp.
- 17 No. 17. Soil solutions, their nature and functions, and classification of alkali lands; by Frank K. Cameron. 1901. 39 pp.
- 18 No. 18. Solution studies of salts occurring in alkali soils; [articles] by Frank K. Cameron, Lyman J. Briggs, and Atherton Seidell. 1901. 89 pp.
- 19 No. 19. Capillary studies and filtration of clay from soil solutions; [articles] by Lyman J. Briggs and Macy H. Lapham. 1902. 40 pp.
- 20 No. 20. Growing Sumatra tobacco under shade in Connecticut Valley; by Milton Whitney. 1902. 31 pp. 7 pl.

**A26.4: Circulars**

- ✓ 1 No. 1. Announcement [of functions of Division]; by Milton Whitney. Mar. 30, 1894. n. t. p. 3 pp.
- ✓ 2 No. 2. Instructions for taking samples of soil for moisture determinations; by Milton Whitney. Apr. 26, 1894. n. t. p. 3 pp.
- 3 No. 3. Soils of Pecos valley, New Mexico; by Thomas H. Means and Frank D. Gardner. n. d. n. t. p. 7 pp.

## Tables

Classifica-  
tion no.

## SOILS BUREAU—Continued

### A26.4: Circulars—Continued

- |   |   |
|---|---|
| 4 | No. 4. Soils of Salt Lake valley, Utah; by Frank D. Gardner and John Stewart. n. d. n. t. p. 11 pp.                                       |
| 5 | No. 5. Bulk fermentation of Connecticut tobacco; by Marcus L. Floyd. n. d. n. t. p. 10 pp.  |
| 6 | No. 6. Instructions for determining in field the salt content of alkali waters and soils; by Milton Whitney. Mar. 7, 1900. n. t. p. 9 pp. |
| 7 | No. 7. Description of soil map of Connecticut valley. June 29, 1900. n. t. p. 4 pp.   |
| 8 | No. 8. Reclamation of salt marsh lands; by Thos. H. Means. Aug. 3, 1901. n. t. p. 10 pp.  |
| 9 | No. 9. Soil survey around Imperial, Cal.; by Thomas H. Means and J. Garnett Holmes. Jan. 10, 1902. n. t. p. 20 pp.                        |

### A26.5: Field operations of Division of Soils (annual)

- |                  |  |
|------------------|--|
|                  | 1899. [1st.] See A1.8:64.  |
| 900 <sup>1</sup> | 1900. 2d. 474 pp. 51 pl.   |
| 900 <sup>2</sup> | Same. 24 maps in 8° folder.  |
|                  | Same, including maps. 56th Cong., 2d sess., H. doc. 526; serial no. 4181.  |
| 901 <sup>1</sup> | 1901. 3d. 647 pp. 96 pl.   |
| 901 <sup>2</sup> | Same. 31 maps in 8° folder.  |
|                  | Same, including maps. 57th Cong., 1st sess., H. doc. 655; serial no. 4384. |

### A26.5<sup>a</sup>: Field operations of Division of Soils (separates.)

[Each of the papers contained in the report is issued separately, with maps belonging thereto.]

## A27. STATISTICS DIVISION

For historical sketch of Division, see Yearbook, 1897 (A1.10:897), p. 258.

### A27.1: Annual reports

- |     |   |
|-----|---|
|     | REPORT OF AGRICULTURAL STATISTICS                                   |
|     | 1863 (Bollman). (In A1.1:863, p. 579.)                              |
|     | 1864 (Bollman). (In A1.1:864, p. 564.)                              |
|     | REPORT OF STATISTICIAN  |
|     | 1865 (Dodge). (In A1.1:865, p. 54.)                                 |
|     | 1866 (Dodge). (In A1.1:866, p. 51.)                                 |
|     | 1867 (Dodge). (In A1.1:867, p. 77.)                                 |
|     | 1868 (Dodge). (In A1.1:868, p. 16.)                                 |
|     | 1869 (Dodge). (In A1.1:869, p. 20.)                                 |
|     | 1870 (Dodge). (In A1.1:870, p. 24.)                                 |
|     | 1871 (Dodge). (In A1.1:871, p. 13.)                                 |
|     | 1872 (Dodge). (In A1.1:872, p. 9.)                                  |
|     | 1873 [Dodge]. (In A1.1:873, p. 15.)                                 |
|     | 1874 (Dodge). (In A1.1:874, p. 15.)                                 |
|     | 1875 (Dodge). (In A1.1:875, p. 17.)                                 |
|     | 1876 (Dodge). (In A1.1:876, p. 87.)                                 |
|     | 1877 (Dodge). (In A1.1:877, p. 149.)                                |
|     | 1878 (Worthington). (In A1.1:878, p. 257.)                          |
|     | 1879 (Worthington). (In A1.1:879, p. 127.)                          |
|     | 1880 (Worthington). (In A1.1:880, p. 185.)                          |
|     | 1881 and 1882 (Dodge). (In A1.1:881-2, p. 577.)                     |
|     | 1883 (Dodge). (In A1.1:883, p. 251.)                                |
|     | 1884 (Dodge). (In A1.1:884, p. 419.)                                |
|     | 1885 (Dodge). (In A1.1:885, p. 345.)                                |
|     | 1886 (Dodge). (In A1.1:886, p. 359.)                                |
|     | 1887 (Dodge). (In A1.1:887, p. 523.)                                |
|     | 1888 (Dodge). (In A1.1:888, p. 405.)                                |
| 889 | 1889 (Dodge), [1]+201-272 pp. (Also in A1.1:889, p. 201.)           |
| 890 | 1890 (Dodge), [1]+287-360+iii pp. 3 pl. (Also in A1.1:890, p. 287.) |
| 891 | 1891 (Dodge), [1]+273-340+v pp. (Also in A1.1:891, p. 273.)         |
| 892 | 1892 (Dodge), iii+403-470+ii pp. (Also in A1.1:892, p. 403.)        |



Classifica-  
tion no.**A27. STATISTICS DIVISION—Continued****A27.1: Annual reports—Continued****REPORT OF STATISTICIAN—Continued**

- 893 1893 (Robinson), iii+465-566+iv pp. (Also in A1.1:893, p. 465.)  
 1894 (Robinson). (In A1.1:894, p. 113.)  
 895 1895 (Robinson), iii+111-129 pp. (Also in A1.1:895, p. 111.)  
 896 1896 (Robinson), iii+115-122 pp. (Also in A1.1:896, p. 115.)  
 897 1897 (Hyde), ii+219-224 pp. (Also in A1.1:897, p. 219.)  
 898 1898 (Hyde), iii+175-178 pp. (Also in A1.1:898, p. 175.)  
 899 1899 (Hyde), iii+263-266 pp. (Also in A1.1:899, p. 263.)  
 900 1900 (Hyde), 293-297 pp. n. t. p. (Also in A1.1:900, p. 293.)  
 901 1901 (Hyde), 341-344 pp. n. t. p. (Also in A1.1:901, p. 341.)  
 1902 (Hyde). (In A1.1:902, p. 401.)

**A27.2: General publications**

- Ag8 Agricultural statistics. American centennial album of agricultural statistics, including maps, charts, diagrams, illustrations of industrial colleges, and specimens of breeds of farm animals; compiled by J. R. Dodge, Washington. 1876. 46 l. oblong large 8°  
 C33 Cereals. Production and distribution of cereals of U. S.; by J. R. Dodge. 1879. 14 pp.  
 [Extract from report of Joseph Nimmo, jr., chief of Bureau of Statistics, Treasury Department, on Internal commerce of U. S., published Dec. 1, 1879.]  
 C88<sup>1</sup> Crop correspondents. Manual of instructions to crop correspondents; by Henry A. Robinson. 1895. 28 pp.  
 C88<sup>2</sup> Same, revised and corrected. 1896. 23 pp.  
 G76<sup>1</sup> Graphics. Album of agricultural graphics of U. S.; [by J. R. Dodge]. 1890. [6] pp. 10 pl. 12½ inches x 18½ inches.  
 G76<sup>2</sup> Same; by J. R. Dodge. 1891. [6] pp. 10 pl. 12½ inches x 18½ inches.  
 In2 Industrial Colleges: The nature of education to be given in them; their several kinds of instruction considered, by Lewis Bollman; to which is added a communication of general plan of college building, with necessary aids to instruction in each department of education, by Richard Owen. [1864.] 40 pp.  
 P96 Publications. [Letter relating to publications.] By Henry A. Robinson. July 15, 1895. (Circ.)  
 St2<sup>1</sup> Statistics. Album of agricultural statistics of U. S.; [by J. R. Dodge]. 1889. 8 pp. 16 pl. 4°  
 St2<sup>2</sup> Same; by J. R. Dodge. 1891. 8 pp. 16 pl. 4°

**A27.3: Bulletins**

See A27.8:

**A27.4: Circulars**

- 1 No. 1. Acreage, production, and value of farm crops in U. S., 1866 to 1895, with other data as to cotton and wool. July 24, 1896. n. t. p. 8 pp.  
 2 No. 2. Wheat crop of world. Aug. 7, 1896. n. t. p. 2 pp.  
 [Reprinted from Statistician's report, March, 1896.]  
 3 No. 3. Farmers' interest in finance. Dec. 4, 1896. n. t. p. 15 pp.  
 4 No. 4. Cotton crop of 1895; by James L. Watkins. Dec. 4, 1896. n. t. p. 15 pp.  
 No. 5. See A27.9:35.  
 No. 6. See A27.9:35.  
 No. 7. See A27.9:35.  
 No. 8. See A27.9:35.  
 9 No. 9. Cotton crop of 1897-98; by James L. Watkins. Nov. 14, 1898. n. t. p. 16 pp.  
 10 No. 10. Brazos river, Texas, flood of June-July, 1899; its effects upon agriculture of submerged region; by E. S. Holmes, jr. Aug. 19, 1899. n. t. p. 8 pp.  
 11 No. 11. World's grain crops in 1899. Oct. 5, 1899. n. t. p. 8 pp.  
 12 No. 12. Changes in railroad freight classifications; by Edward G. Ward, jr. April 30, 1900. n. t. p. 43 pp.

# Tables

Classification  
no.

## A27. STATISTICS DIVISION—Continued

### A27.4: Circulars—Continued

- 13 No. 13. List of free employment agencies for use of farmers; by Max West. June 28, 1900. 42 pp.  
14 No. 14. Estimates of Russian crops; by E. T. Peters. Feb. 5, 1901. n. t. p. 11 pp.

### A27.5: Crop circulars

[From first issue of crop circular, May, 1898: "Crop circulars will hereafter take the place of the crop reports, new series, issued monthly (except January), and will consist of the information contained in the telegraphic reports of the 10th of each month, with such additions as will enhance its value to the farmers and as the circular form will permit. Special crop reports will not be abandoned, but their issue will depend upon the seasonableness and importance of the subject and not upon a fixed date."]

898 1898. May, 3 pp.

June, 4 pp.

July, 4 pp.

Aug., 4 pp.

Sept., 4 pp.

Oct., 8 pp.

Nov., 4 pp.

899 1899. May, 4 pp.

June, 4 pp.

July, 8 pp.

Aug., 4 pp.

Sept., 4 pp.

Oct., 4 pp.

Nov., 4 pp.

900 1900. Apr., 4 pp.

[Discontinued.]

### A27.6: Crop reporter 4°

[Announcement (v. 1, no. 1, May, 1899): "This publication is issued for the benefit of the crop correspondents of the Division of Statistics, and as a convenient means of communication between them and the Statistician. It will be sent every monthly correspondent regularly enrolled so long as he continues to supply the Statistician with the information asked for, and an earnest effort will be made to make it interesting, instructive, and helpful to him in his work. This is not designed for general distribution and will not be mailed to any but actual and active crop correspondents."]

1 V. 1. No. 1, May, 1899. n. t. p. 4 pp.

No. 2, June, 1899. n. t. p. 4 pp.

No. 3, July, 1899. n. t. p. 4 pp.

No. 4, Aug., 1899. n. t. p. 4 pp.

No. 5, Sept., 1899. n. t. p. 4 pp.

No. 6, Oct., 1899. n. t. p. 4 pp.

No. 7, Nov., 1899. n. t. p. 4 pp.

No. 8, Dec., 1899. n. t. p. 4 pp.

No. 9, Jan., 1900. n. t. p. 4 pp.

No. 10, Feb., 1900. n. t. p. 4 pp.

No. 11, Mar., 1900. n. t. p. 4 pp.

No. 12, Apr., 1900. n. t. p. 4 pp.

2 V. 2. No. 1, May, 1900. n. t. p. 8 pp.

No. 2, June, 1900. n. t. p. 8 pp.

No. 3, July, 1900. n. t. p. 8 pp.

No. 4, Aug., 1900. n. t. p. 8 pp.

Same, supplement. n. t. p. 4 pp.

No. 5, Sept., 1900. n. t. p. 8 pp.

No. 6, Oct., 1900. n. t. p. 8 pp.

No. 7, Nov., 1900. n. t. p. 8 pp.

No. 8, Dec., 1900. n. t. p. 4 pp.

No. 9, Jan., 1901. n. t. p. 8 pp.

No. 10, Feb., 1901. n. t. p. 8 pp.

No. 11, Mar., 1901. n. t. p. 8 pp.

No. 12, Apr., 1901. n. t. p. 8 pp.

3 V. 3. No. 1, May, 1901. n. t. p. 8 pp.

No. 2, June, 1901. n. t. p. 8 pp.

Classifica-  
tion no.**A27. STATISTICS DIVISION—Continued****A27.6: Crop reporter—Continued**

- |   |  |
|---|--|
| 3 | V. 3. No. 3, July, 1901. n. t. p. 8 pp.<br>No. 4, Aug., 1901. n. t. p. 8 pp.<br>No. 5, Sept., 1901. n. t. p. 8 pp.<br>No. 6, Oct., 1901. n. t. p. 8 pp.<br>No. 7, Nov., 1901. n. t. p. 8 pp.<br>No. 8, Dec., 1901. n. t. p. 8 pp.<br>No. 9, Jan., 1902. n. t. p. 8 pp.<br>No. 10, Feb., 1902. n. t. p. 8 pp.<br>No. 11, Mar., 1902. n. t. p. 8 pp.<br>No. 12, Apr., 1902. n. t. p. 8 pp. |
| 4 | V. 4. No. 1, May, 1902. n. t. p. 8 pp.<br>No. 2, June, 1902. n. t. p. 8 pp.<br>No. 3, July, 1902. n. t. p. 8 pp.<br>No. 4, Aug., 1902. n. t. p. 8 pp.<br>No. 5, Sept., 1902. n. t. p. 8 pp.<br>No. 6, Oct., 1902. n. t. p. 8 pp.<br>No. 7, Nov., 1902. n. t. p. 8 pp.<br>No. 8, Dec., 1902. n. t. p. 8 pp.   |

**A27.7: Monthly crop synopsis**

[Synopsis of the monthly statistical reports (A27.9:) issued as a four-page leaflet, soon after the 10th of each month from Mar., 1890, to May, 1896, inclusive, and bearing a number identical with that of the report which it summarizes.]

- |     |  |
|-----|--|
| 890 | 1890. Mar. (Synopsis of Statistical Report no. 71.)<br>Apr. (Synopsis of Statistical Report no. 72.)<br>May. (Synopsis of Statistical Report no. 73.)<br>June. (Synopsis of Statistical Report no. 74.)<br>July. (Synopsis of Statistical Report no. 75.)<br>Aug. (Synopsis of Statistical Report no. 76.)<br>Sept. (Synopsis of Statistical Report no. 77.)<br>Oct. (Synopsis of Statistical Report no. 78.)<br>Nov. (Synopsis of Statistical Report no. 79.)<br>Dec. (Synopsis of Statistical Report no. 80.)  |
| 891 | 1891. Feb. (Synopsis of Statistical Report no. 81.)<br>Mar. (Synopsis of Statistical Report no. 82.)<br>Apr. (Synopsis of Statistical Report no. 83.)<br>May. (Synopsis of Statistical Report no. 84.)<br>June. (Synopsis of Statistical Report no. 85.)<br>July. (Synopsis of Statistical Report no. 86.)<br>Aug. (Synopsis of Statistical Report no. 87.)<br>Sept. (Synopsis of Statistical Report no. 88.)<br>Oct. (Synopsis of Statistical Report no. 89.)<br>Nov. (Synopsis of Statistical Report no. 90.)<br>Dec. (Synopsis of Statistical Report no. 91.) |
| 892 | 1892. Feb. (Synopsis of Statistical Report no. 92.)<br>Mar. (Synopsis of Statistical Report no. 93.)<br>Apr. (Synopsis of Statistical Report no. 94.)<br>May. (Synopsis of Statistical Report no. 95.)<br>June. (Synopsis of Statistical Report no. 96.)<br>July. (Synopsis of Statistical Report no. 97.)<br>Aug. (Synopsis of August Crop Report.)<br>Sept. (Synopsis of September Crop Report.)<br>Oct. (Synopsis of October Crop Report.)<br>Nov. (Synopsis of November Crop Report.)<br>Dec. (Synopsis of December Crop Report.)                            |
| 893 | 1893. Jan. (Synopsis of December Crop Report.)<br>Feb. (Synopsis of Statistical Report no. 101.)<br>Mar. (Synopsis of Statistical Report no. 102.)<br>Apr. (Synopsis of Statistical Report no. 103.)<br>May. (Synopsis of Statistical Report no. 104.)<br>June. (Synopsis of Statistical Report no. 105.)<br>July. (Synopsis of Statistical Report no. 106.)<br>Aug. (Synopsis of Statistical Report no. 107.)   |

# Tables

Classification  
no.

## A27. STATISTICS DIVISION—Continued

### A27.7: Monthly crop synopsis—Continued

893	1893.	Sept.	(Synopsis of Statistical Report no. 108.)
		Oct.	(Synopsis of Statistical Report no. 109.)
		Nov.	(Synopsis of Statistical Report no. 110.)
		Dec.	(Synopsis of Statistical Report no. 111.)
894	1894.	Feb.	(Synopsis of Statistical Report no. 112.)
		Mar.	(Synopsis of Statistical Report no. 113.)
		Apr.	(Synopsis of Statistical Report no. 114.)
		May.	(Synopsis of Statistical Report no. 115.)
		June.	(Synopsis of Statistical Report no. 116.)
		July.	(Synopsis of Statistical Report no. 117.)
		Aug.	(Synopsis of Statistical Report no. 118.)
		Sept.	(Synopsis of Statistical Report no. 119.)
		Oct.	(Synopsis of Statistical Report no. 120.)
		Nov.	(Synopsis of Statistical Report no. 121.)
895	1895.	Jan.	(Synopsis of Statistical Report no. 122.)
		Feb.	(Synopsis of Statistical Report no. 123.)
		Mar.	(Synopsis of Statistical Report no. 124.)
		Apr.	(Synopsis of Statistical Report no. 125.)
		May.	(Synopsis of Statistical Report no. 126.)
		June.	(Synopsis of Statistical Report no. 127.)
		July.	(Synopsis of Statistical Report no. 128.)
		Aug.	(Synopsis of Statistical Report no. 129.)
		Sept.	(Synopsis of Statistical Report no. 130.)
		Oct.	(Synopsis of Statistical Report no. 131.)
		Nov.	(Synopsis of Statistical Report no. 132.)
		Dec.	(Synopsis of Statistical Report no. 133.)
896	1896.	Mar.	(Synopsis of Statistical Report no. 135.)
		Apr.	(Synopsis of Statistical Report no. 136.)
		May.	(Synopsis of Statistical Report no. 137.)

[Discontinued.]

### A27.8: Miscellaneous series, bulletin .

[The word "Bulletin" was added to the series title beginning with no. 9.]

- 1 No. 1. Report on flax, hemp, ramie, and jute, with considerations upon flax and hemp culture in Europe, report on ramie machine trials of 1889 in Paris, and present status of fiber industries in U. S.; by Charles Richards Dodge. [1st ed.] 1890. 104 pp.  
See, for 2d ed., A11.5:1.
- 2 No. 2. Report on agriculture of South America, with maps and latest statistics of trade; by Almont Barnes. 1892. 189 pp.
- 3 No. 3. Coöperative credit associations in certain European countries, and their relation to agricultural interests; by Edward T. Peters. 1892. 117 pp.
- 4 No. 4. Wages of farm labor in United States, results of nine statistical investigations from 1866 to 1892, with extensive inquiries concerning wages from 1840 to 1865. 1892. 69 pp.
- 5 No. 5. Production and distribution of principal agricultural products of world. 1893. 205 pp.
- 6 No. 6. Rice: its cultivation, production, and distribution in U. S. and foreign countries, by Amory Austin; with chapter on Rice soils of South Carolina, by Milton Whitney. 1893. 89 pp.
- 7 No. 7. An agricultural survey of Wyoming; by John W. Hoyt. 1893. 72 pp.
- 8 No. 8. Recent features of our foreign trade; by Edward T. Peters. 1894. 24 pp.
- 9 No. 9. Production and price of cotton for 100 years; by James L. Watkins. 1895. 20 pp.  
See, for abstract, A27.8a:C82.
- 10 No. 10. Railway charges for transportation of wool. 1896. 30 pp.
- 11 No. 11. Number and value of farm animals of U. S., and animal products, 1880-1896. 1896. 63 pp.
- 12 No. 12. Freight charges for ocean transportation of products of agriculture, Oct. 1, 1895-Oct. 1, 1896. 1896. 53 pp.

Classification  
no.

**A27. STATISTICS DIVISION—Continued**

**A27.8: Miscellaneous series, bulletin—Continued**

- 13 No. 13. Fertilizer industry; review of statistics of production and consumption, with abstract of State laws for analysis and sale; by John Hyde. 1898. 27 pp.
- 14 No. 14. Of what service are statistics to the farmer? by John Hyde. 1898. iii+258-270 pp.  
[Reprint from Yearbook, 1897, p. 258. See A1.10:1897.]
- 15<sup>1</sup> No. 15. Changes in rates of charge for railway and other transportation services; by H. T. Newcomb. 1898. 80 pp.
- 15<sup>2</sup> Same, revised, 1901. 86 pp.
- 16 No. 16. Cost of cotton production; by James L. Watkins. 1899. 99 pp.
- 17 No. 17. Cotton crop of 1898-99; by James L. Watkins. 1900. 32 pp.
- 18 No. 18. Course of prices of farm implements and machinery for series of years; by George K. Holmes. 1901. 31 pp.
- 19 No. 19. Cotton crop of 1899-1900; by James L. Watkins. 1901. 46 pp.
- 20 No. 20. Wheat growing and general agricultural conditions in Pacific coast region of U. S.; by Edwin S. Holmes, jr. 1901. 44 pp. 8 pl. 1 map.
- 21 No. 21. Rates of charge for transporting garden truck, with notes on growth of industry; by Edward G. Ward, jr., and Edwin S. Holmes, jr. 1901. 86 pp.
- 22 No. 22. Wages of farm labor in U. S.; result of eleven statistical investigations, 1866-1899. 1901. 47 pp.
- 23 No. 23. Statistics on fruit industry of California; by Edwin S. Holmes, jr. 1901. 11 pp.

**A27.8<sup>a</sup>: Miscellaneous series, bulletin (separates)**

- C82 Cotton and currency. [1895.] n. t. p. 3 pp.  
[Abstract of Misc. series, Bull. No. 9. See A27.8:9.]

**A27.9: Statistical reports**

[Contains reports on condition of crops, and special subjects of interest to farmers. Issued as "Monthly" or "Bi-monthly Report" of Department from May, 1863, to December, 1876, when the series was discontinued and the issue of the statistical matter was transferred to the series of "Special reports" (A1.6:) and there appeared under various numbers, not always consecutive, from Jan., 1877, to Sept., 1883. Another change was made in October, 1883, when "New Series, Report no. 1," appeared containing the crop statistics. This last series was continued, consecutively numbered, up to no. 155, December, 1897. No. 156 was issued April 20, 1899. From May, 1898, to April, 1900, the statistics were issued in a "Crop circular" (A27.5). Beginning with May, 1900, they were merged into the "Crop Reporter" (A27.6:) which is now being issued. A "Synoptical index" of this series was issued by the Department in 1897 (A21.8:2), but as it did not give a table of the various reports of the Statistician, indexed under the comprehensive title "Reports of the Statistician," it can not be definitely determined whether the present collation includes all or more than the index. All reports of the Statistician relative to crops and farm animals have, however, been included. The volume numbers are assigned to the yearly groups of reports to facilitate listing and reference.]

[V. 1.] 1863.

- [No. 1.] Monthly report on condition of crops, May and June, 1863, n. t. p. 16 pp.
- [No. 2.] Same, July, 1863, n. t. p. 19 pp.
- [No. 3.] Same, Aug., 1863, n. t. p. 20 pp.
- [No. 4.] Same, Sept., 1863, n. t. p. 41 pp.
- [No. 5.] Same, Oct., 1863, n. t. p. 20 pp.
- [No. 6.] Same, Nov., 1863, n. t. p. 38 pp.  
Same, Dec. (None issued.)

[V. 2.] 1864.

- [No. 1.] Bi-monthly report of Agricultural Department, Jan. and Feb., 1864. 72 pp.
- [No. 2.] Same, Mar. and Apr., 1864. 96 pp.
- [No. 3.] Same, Apr. and May, 1864. 38 pp.
- [No. 4.] Same, June and July, 1864. 23 pp.  
Same, Aug. (None issued.)
- [No. 5.] Same, Sept. and Oct., 1864. 56 pp.
- [No. 6.] Same, Nov. and Dec., 1864. 59 pp.

# Tables

Classification  
no.

## A27. STATISTICS DIVISION—Continued

### A27.9: Statistical reports—Continued

- 3 [V. 3.] 1865.  
[No. 1.] Monthly report of Agricultural Department, Jan., 1865.  
50 pp.  
[No. 2.] Same, Feb., 1865. 48 pp.  
[No. 3.] Same, Mar., 1865. 41 pp.  
[No. 4.] Same, Apr.—May, 1865. 86 pp.  
[No. 5.] Same, June—July, 1865. 60 pp.  
[No. 6.] Same, Aug., 1865. 54 pp.  
[No. 7.] Same, Sept., 1865. 51 pp.  
[No. 8.] Same, Oct., 1865. 46 pp.  
[No. 9.] Same, Nov., 1865. 53 pp.  
[No. 10.] Same, Dec., 1865. 43 pp.
- 4 [V. 4.] 1866.  
Monthly report of Department of Agriculture for year 1866; J. R. Dodge, editor. 1867. vii+457 pp.  
Contents:  
Jan., 50 pp.; Feb., pp. 51-122; Mar., pp. 123-169; Apr., pp. 171-228; May (none issued); June, pp. 229-276; July, pp. 277-324; Aug. (none issued); Sept., pp. 325-371; Oct., pp. 373-408; Nov. and Dec., pp. 409-457.
- 5 [V. 5.] 1867.  
Monthly reports of Department of Agriculture for year 1867; J. R. Dodge, editor. 1868. xi+397 pp.  
Contents:  
Jan., 48 pp.; Feb., 49-80; Mar., pp. 81-127; Apr., pp. 129-186; May-June, pp. 187-233; July, pp. 235-270; Aug.-Sept., pp. 271-311; Oct., pp. 313-352; Nov.-Dec., pp. 353-397.
- 6 [V. 6.] 1868.  
Monthly reports of Department of Agriculture for year 1868; edited by J. R. Dodge. 1868. xi+483 pp.  
Contents:  
Jan., 55 pp.; Feb., pp. 57-107; Mar., 109-169; Apr., pp. 171-234; May-June, pp. 235-307; July, pp. 309-339; Aug.-Sept., pp. 341-383; Oct., pp. 385-420; Nov.-Dec., pp. 421-483.
- 7 [V. 7.] 1869.  
Monthly reports of Department of Agriculture for year 1869; edited by J. R. Dodge. 1869. xii+419 pp.  
Contents:  
Jan., 40 pp.; Feb., pp. 41-82; Mar.-Apr., pp. 83-185; May-June, pp. 187-262; July, pp. 263-314; Aug.-Sept., pp. 263-326; Oct., pp. 327-386; Nov.-Dec., pp. 327-419.  
NOTE.—Starred pages in index refer to those pages duplicated in Aug.-Sept. and Nov.-Dec. numbers.
- 8 [V. 8.] 1870.  
Monthly reports of Department of Agriculture for year 1870; edited by J. R. Dodge. 1871. xiii+498 pp.  
Contents:  
Jan., 64 pp.; Feb., pp. 65-110; Mar.-Apr., pp. 111-187; May-June, pp. 189-260; July, pp. 261-308; Aug.-Sept., pp. 309-385; Oct., pp. 387-454; Nov.-Dec., pp. 455-498.
- 9 [V. 9.] 1871.  
Monthly reports of Department of Agriculture for year 1871. 1872.  
xiv+517 pp.  
Contents:  
Jan., 52 pp.; Feb., pp. 53-92; Mar.-Apr., pp. 93-168; May-June, pp. 169-230; July, pp. 231-291; Aug.-Sept., pp. 293-376; Oct., pp. 377-430; Nov.-Dec., pp. 431-517.
- 10 [V. 10.] 1872.  
Monthly reports of Department of Agriculture for year 1872. 1873.  
xiv+528 pp.  
Contents:  
Jan., 48 pp.; Feb., pp. 49-102; Mar.-Apr., pp. 103-169; May-June, pp. 171-246; July, pp. 247-326; Aug.-Sept., pp. 327-409; Oct., pp. 411-465; Nov.-Dec., pp. 467-528.
- 11 [V. 11.] 1873.  
Monthly reports of Department of Agriculture for year 1873. 1873.  
xii+618 pp.  
Contents:  
Jan., 48 pp.; Feb. (none issued); Mar., pp. 49-131; Apr., pp. 131-208; May-June, pp. 209-297; July, pp. 299-383; Aug.-Sept., pp. 385-463; Oct., pp. [1]+465-518; Nov.-Dec., pp. 519-618.

Classifica-  
tion no.

**A27. STATISTICS DIVISION—Continued**

**A27.9: Statistical reports—Continued**

- 12 [V. 12.] 1874.  
Monthly reports of Department of Agriculture for year 1874. 1875.  
xi+545 pp.  
Contents:  
Jan., 70 pp.; Feb.-Mar., pp. 71-173; Apr.-May, pp. 175-242; June, pp. 243-285; July,  
pp. 287-338; Aug.-Sept., pp. 339-400; Oct., pp. 401-459; Nov.-Dec., pp. 461-545.
- 13 [V. 13.] 1875.  
Monthly reports of Department of Agriculture for year 1875. 1876.  
xiii+532 pp.  
Contents:  
Jan., 63 pp.; Feb.-Mar., pp. 65-146; Apr., pp. [1]+147-186; May-June, pp. 187-257,  
3 pl.; July, pp. 259-329, 1 pl.; Aug.-Sept., pp. 331-411; Oct., pp. 413-471; Nov.-Dec.,  
pp. 473-532.
- 14 [V. 14.] 1876.  
Monthly reports of Department of Agriculture for year 1876. 1877.  
xi+511 pp.  
Contents:  
Jan.-Feb., 74 pp. 2 pl.; Mar.-Apr., pp. 75-129, 1 pl.; May-June, pp. [1]+131-214, 10 pl.;  
July, pp. 215-291; Aug.-Sept., pp. 293-379, 1 pl.; Oct., pp. 381-439, 2 pl.; Nov.-Dec.,  
pp. 441-511.  
[Numbers in that part of the Statistical Series designated as "Special Reports" which  
are missing here will be found in the series of Special Reports under the Secre-  
tary's Office (A1.6.) All of the Special Reports which are properly in the Statis-  
tical Series are, however, found here, those in A1.6 being special reports on mis-  
cellaneous subjects.]
- 15 [V. 15.] 1877.  
Special report no. 2. Report upon condition of crops; also, state-  
ment of international wheat supply, and our wheat exports, with  
foreign crops and prices. 1877. 35 pp.
- 16 [V. 16.] 1878.  
Special reports no. 5. Report upon condition of crops, June 1, 1878.  
1878. 10 pp.  
Special reports no. 6. Same, July 1, 1878. 1878. 17 pp.  
Special reports no. 7. Same, Aug. 1, 1878. 1878. 26 pp.  
Special reports no. 8. Same, Sept. 1, 1878. 1878. 22 pp.  
Special report no. 9. Same, Dec. 1, 1878. 1878. 28 pp.
- 17 [V. 17.] 1879.  
Special report no 10. Report upon condition of crops and live stock,  
January, 1879. 1879. 21 pp.  
Special report no. 13, April, 1879. 1879. 26 pp.  
Special report no. 14. Same, June 1, 1879. 1879. 22 pp.  
Special report no. 15. Report upon condition of crops, July 1, 1879.  
1879. 24 pp.  
Special report no. 16. Same, Aug. 1, 1879. 1879. 25 pp.  
Special report no. 17. Same, Sept. 1, 1879. 1879. 25 pp.  
Special report no. 19. Same, Nov. 1, 1879. 1879. 21 pp.  
Special report no. 20. Same, Dec. 1, 1879. 1879. 15 pp.
- 18 [V. 18.] 1880.  
Special report no 21. Report upon number and prices of farm ani-  
mals, Jan. 1, 1880. 1880. 27 pp.  
Special report no. 23. Report upon condition of crops and live stock,  
April, 1880. 1880. 22 pp.  
Special report no. 24. Report upon condition of crops, June and July,  
1880. 1880. 31 pp.  
Special report no. 25. Same, Aug. 1, 1880. 1880. 29 pp.  
Special report no. 27. Same, Sept. 1, 1880. 1880. 34 pp.  
Special report no. 29. Same, Nov. 1, 1880. 1880. 19 pp.  
Special report no. 30. Same, Dec. 1, 1880. 1880. 19 pp.
- 19 [V. 19.] 1881.  
Special report no. 32. Report upon condition of crops and live stock,  
April, 1881. 1881. 22 pp.  
Special report no. 37. Report upon condition of crops, June and July,  
1881. 1881. 24 pp.  
Special report no. 38. Same, Aug. 1, 1881. 1881. 21 pp.  
Special report no. 39. Same, Sept. 1, 1881. 1881. 30 pp.



**Tables**Classifica-  
tion no.**A27. STATISTICS DIVISION—Continued****A27.9: Statistical reports—Continued**

20

[V. 20] 1882.

Special report no. 41. Report upon estimated production of cereals of U. S., for year 1881. [February, 1882.] 1882. 8 pp.

Special report no. 42. Condition of winter grain and numbers and condition of farm animals of U. S., April, 1882. 1882. 82 pp.

Special report no. 43. Condition of winter grain; progress of cotton and corn planting; rate of wages and labor; and results of tile draining, May, 1882. 1882. 20 pp.

Special report no. 44. Acreage and condition of cotton; condition of all cereals; and area of spring grain, June, 1882. 1882. 15 pp.

Special report no. 45. Area and condition of corn; condition of cotton, and of small grains, sorghum, tobacco, etc., July, 1882. 1882. 33 pp.

Special report no. 46. Condition of corn and cotton, of spring wheat, fruits, etc.; also freight rates of transportation companies, August, 1882. 1882. 54 pp.

Special report no. 49. Condition of corn and cotton, of potatoes, fruits, etc.; also freight rates of transportation companies, September, 1882. 1882. 48 pp.

Special report no. 51. Yield and quality of small grain; condition of corn and cotton, of potatoes, tobacco, etc., also freight rates of transportation companies, October, 1882. 1882. 58 pp.

Special report no. 52. Yield per acre of cotton, corn, potatoes, and other field crops, with comparative product of fruits; also local freight rates of transportation companies, November, 1882. 1882. 109 pp.

Special report no. 53. Product and price of principal crops of 1882; also freight rates of transportation companies, including changes of winter tariff, December, 1882. 1882. 79 pp.

21

[V. 21] 1883.

Special report no. 56. Numbers and values of farm animals; product and quality of cotton; and comparative values of American and European farm implements; also rates of transportation in Europe and U. S., February, 1883. 1883. 74 pp.

Special report no. 57. Distribution and consumption of corn and wheat, and rates of transportation of farm products, March, 1883. 1883. 39 pp.

Special report no. 58. Area and condition of winter wheat, and condition of farm animals; also spring rates of transportation of farm products, April, 1883. 1883. 46 pp.

Special report no. 59. Condition of winter grain; progress of cotton planting, and estimates of cereals of 1882, with freight rates of transportation companies, May, 1883. 1883. 65 pp.

Special report no. 60. Acreage of spring grain and cotton; condition of winter wheat, and European grain prospects, with freight rates of transportation companies, June, 1883. 1883. 56 pp.

Special report no. 61. Area of corn, potatoes, and tobacco, and condition of growing crops in U. S. and Europe, with report on rates of transportation, July, 1883. 1883. 48 pp.

Special report no. 64. Report on condition of crops, "American competition," and freight rates of transportation companies, August, 1883. 1883. 80 pp.

Special report no. 65. Report on condition of crops and on freight rates of transportation companies, September, 1883. 1883. 55 pp.

New series, report no. 1. Condition of crops, yield of grain per acre, and freight rates of transportation companies, October, 1883. 1883. 28 pp.

New series, report no. 2. Yield of crops per acre; progress of sorghum growing; crops of Europe; and freight rates of transportation companies, November, 1883. 1883. 59 pp.

New series, report no. 3. Crops of year; cereal production in Europe; and freight rates of transportation companies, December, 1883. 1883. 74 pp.

Classifica-  
tion no.**A27. STATISTICS DIVISION—Continued****A27.9: Statistical reports—Continued**

22

[V. 22] 1884.

New series, report no. 4. Number and value of farm animals; certain causes affecting wages of farm labor; and freight rates of transportation companies, February, 1884. 1884. 56 pp.

New series, report no. 5. Distribution and consumption of corn and wheat, and rates of transportation of farm products, March, 1884. 1884. 44 pp.

New series, report no. 6. Area of winter grain; condition of farm animals; and freight rates of transportation companies, April, 1884. 1884. 48 pp.

New series, report no. 7. Condition of winter grain; progress of cotton planting; and estimates of cereals of 1883, with freight rates of transportation companies, May, 1884. 1884. 36 pp.

New series, report no. 8. Acreage of spring grain and cotton; condition of winter wheat; European grain prospects, with freight rates of transportation companies, June, 1884. 1884. 39 pp.

New series, report no. 9. Area of corn, potatoes, and tobacco; condition of growing crops, and rates of transportation, July, 1884. 1884. 59 pp.

New series, report no. 10. Condition of growing crops and rates of transportation, August, 1884. 1884. 36 pp.

New series, report no. 11. Condition of crops; wheat in India; and freight rates of transportation companies, September, 1884. 1884. 87 pp.

New series, report no. 12. Condition of crops; yield of grain per acre; and freight rates of transportation companies, October, 1884. 1884. 44 pp.

New series, report no. 13. Yield of crops per acre; agriculture in Mexico; and freight rates of transportation companies, November, 1884. 1884. 94 pp.

New series, report no. 14. Crops of year, and freight rates of transportation companies, December, 1884. 1885. 60 pp.

23

[V. 23.] Reports of Bureau of Statistics of Department of Agriculture, (nos. 15-25, new series) [Jan.-Dec., 1885]; by J. R. Dodge, Statistician, Washington, D. C. 1885.

Contents:

Index. v pp.

New series, report no. 15. Numbers and values of farm animals; cotton crop and its distribution; and freight rates of transportation companies. Jan. and Feb., 1885. 1885. 64 pp.

New series, report no. 16. Distribution and consumption of corn and wheat; consumption of cereals in Europe; and freight rates of transportation companies. Mar., 1885. 1885. 47 pp.

New series, report no. 17. Area of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1885. 1885. 80 pp.

New series, report no. 18. Condition of winter grain; progress of cotton planting; wages of farm labor; also, freight rates of transportation companies. May, 1885. 1885. 60 pp.

New series, report no. 19. Acreage of spring grain and cotton; condition of winter wheat; European grain prospects; with freight rates of transportation companies. June, 1885. 1885. 56 pp.

New series, report no. 20. Area of corn, potatoes, and tobacco; condition of growing crops; and rates of transportation. July, 1885. 1885. 64 pp.

New series, report no. 21. Condition of growing crops; international dairy statistics; and rates of transportation. Aug., 1885. 1885. 70 pp.

New series, report no. 22. Condition of crops in America and Europe; and freight rates of transportation companies. Sept., 1885. 1885. 58 pp.

New series, report no. 23. Condition of crops; yield of grain per acre; and freight rates of transportation companies. Oct., 1885. 1885. 55 pp.

New series, report no. 24. Yield of crops per acre; and freight rates of transportation companies. Nov., 1885. 1885. 54 pp.

New series, report no. 25. Crops of the year; and freight rates of transportation companies. Dec., 1885. 1885. 55 pp.

24

[V. 24.] Reports of Bureau of Statistics of Department of Agriculture, (nos. 26-36) [Jan.-Dec., 1886]; by J. R. Dodge. 1886. 580 pp.

Contents:

New series, report no. 26. Numbers and values of farm animals; cotton crop and its distribution; and freight rates of transportation companies. Jan. and Feb., 1886. 1886. pp. 1-56.

New series, report no. 27. Distribution and consumption of corn and wheat; production of European wheat; and freight rates of transportation companies. Mar., 1886. 1886. pp. 57-108.

# Tables

Classifica-  
tion no.

## A27. STATISTICS DIVISION—Continued

### A27.9: Statistical reports—Continued

- 24 [V. 24.] Reports of Bureau of Statistics of Department of Agriculture, etc.—Continued  
Contents—Continued  
New series, report no. 28. Area of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1886. 1886. pp. 109-170.  
New series, report no. 29. Condition of winter grain; progress of cotton planting; and freight rates of transportation companies. May, 1886. 1886. pp. 171-218.  
New series, report no. 30. Acreage of spring wheat and cotton; condition of winter grain; world's supply of wheat; with freight rates of transportation companies. June, 1886. 1886. pp. 219-263.  
New series, report no. 31. Area of corn, potatoes, and tobacco; condition of growing crops; and freight rates of transportation companies. July, 1886. 1886. pp. 265-308.  
New series, report no. 32. Condition of growing crops; and freight rates of transportation companies. Aug., 1886. 1886. pp. 309-360.  
New series, report no. 33. Condition of crops in America and Europe; and freight rates of transportation companies. Sept., 1886. 1886. pp. 361-419.  
New series, report no. 34. Condition of crops; yield of grain per acre; and freight rates of transportation companies. Oct., 1886. 1886. pp. 421-460.  
New series, report no. 35. Yield of crops per acre; and freight rates of transportation companies. Nov., 1886. 1886. pp. 461-532.  
New series, report no. 36. Crops of the year; and freight rates of transportation companies. Dec., 1886. 1886. pp. 533-580.
- 25 [V. 25.] Reports of Bureau of Statistics of Department of Agriculture, (nos. 37-47) [Jan.-Dec., 1887]; by J. R. Dodge. 1888. 7+662 pp.  
Contents:  
Index. 7 pp.  
New series, report no. 37. Numbers and values of farm animals; cotton crop and its distribution; and freight rates of transportation companies. Jan. and Feb., 1887. 1887. pp. 1-56.  
New series, report no. 38. Distribution and consumption of corn and wheat; wheat product of the world; and freight rates of transportation companies. Mar., 1887. 1887. pp. 57-100.  
New series, report no. 39. Condition of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1887. 1887. pp. 101-164.  
New series, report no. 40. Condition of winter grain; progress of cotton planting; and freight rates of transportation companies. May, 1887. 1887. pp. 165-218.  
New series, report no. 41. Acreage of wheat and cotton; condition of cereal crops; with freight rates of transportation companies. June, 1887. 1887. pp. 219-278.  
New series, report no. 42. Area of corn, potatoes, and tobacco; condition of growing crops; and freight rates of transportation companies. July, 1887. 1887. pp. 279-328.  
New series, report no. 43. Condition of growing crops; and freight rates of transportation companies. Aug., 1887. 1887. pp. 327-406.  
New series, report no. 44. Condition of crops in America and Europe; and freight rates of transportation companies. Sept., 1887. 1887. pp. 407-470.  
New series, report no. 45. Condition of crops; yield of grain per acre; labor and prices in Mexico; and freight rates of transportation companies. Oct., 1887. 1887. pp. 471-558.  
New series, report no. 46. Yield of crops per acre; and freight rates of transportation companies. Nov., 1887. 1887. pp. 559-614.  
New series, report no. 47. Crops of the year; and freight rates of transportation companies. Dec., 1887. 1887. pp. 615-662.
- 26 [V. 26.] Reports of Bureau of Statistics of Department of Agriculture, (nos. 48-58) [Jan.-Dec., 1888]; by J. R. Dodge. 1889. 7+592 pp.  
Contents:  
Index. 7 pp.  
New series, report no. 48. Numbers and values of farm animals; and freight rates of transportation companies. Jan. and Feb., 1888. 1888. pp. 1-64.  
New series, report no. 49. Distribution and consumption of corn and wheat; and freight rates of transportation companies. Mar., 1888. 1888. pp. 65-96.  
New series, report no. 50. Condition of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1888. 1888. pp. 97-152.  
New series, report no. 51. Condition of winter grain; progress of cotton planting; wages of farm labor; also freight rates of transportation companies. May, 1888. 1888. pp. 153-200.  
New series, report no. 52. Acreage of wheat and cotton; condition of cereal crops; with freight rates of transportation companies. June, 1888. 1888. pp. 201-259.  
New series, report no. 53. Area of corn, potatoes, and tobacco; condition of growing crops; and freight rates of transportation companies. July, 1888. 1888. pp. 261-323.  
New series, report no. 54. Condition of growing crops; and freight rates of transportation companies. Aug., 1888. 1888. pp. 325-380.  
New series, report no. 55. Condition of crops in America and Europe; and freight rates of transportation companies. Sept., 1888. 1888. pp. 381-444.  
New series, report no. 56. Condition of crops; yield of grain per acre; and freight rates of transportation companies. Oct., 1888. 1888. pp. 445-500.  
New series, report no. 57. Yield of crops per acre; and freight rates of transportation companies. Nov., 1888. 1888. pp. 501-552.  
New series, report no. 58. Crops of the year; and freight rates of transportation companies. Dec., 1888. 1888. pp. 553-592.

Classifica-  
tion no.

**A27. STATISTICS DIVISION—Continued**

**A27.9: Statistical reports—Continued**

- 27 [V. 27.] Reports of Bureau of Statistics of Department of Agriculture  
(nos. 59–69) [Jan.–Dec., 1889]. 1890. 7+548 pp.

Contents:

Index. 7 pp.  
New series, report no. 59. Numbers and values of farm animals; and freight rates of transportation companies. Jan. and Feb., 1889. 1889. pp. 1–48.  
New series, report no. 60. Distribution and consumption of corn and wheat; and freight rates of transportation companies. Mar., 1889. 1889. pp. 49–88.  
New series, report no. 61. Condition of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1889. 1889. pp. 89–136.  
New series, report no. 62. Condition of winter grain; progress of cotton planting; also, freight rates of transportation companies. May, 1889. 1889. pp. 137–188.  
New series, report no. 63. Acreage of wheat and cotton; condition of cereal crops; and freight rates of transportation companies. June, 1889. 1889. pp. 189–236.  
New series, report no. 64. Area of corn, potatoes, and tobacco; condition of growing crops; and freight rates of transportation companies. July, 1889. 1889. pp. 237–276.  
New series, report no. 65. Condition of growing crops; and freight rates of transportation companies. Aug., 1889. 1889. pp. 277–332.  
New series, report no. 66. Condition of crops in America and Europe; and freight rates of transportation companies. Sept., 1889. 1889. pp. 333–392.  
New series, report no. 67. Condition of crops; yield of grain per acre; and freight rates of transportation companies. Oct., 1889. 1889. pp. 393–435.  
New series, report no. 68. Yield of crops per acre; and freight rates of transportation companies. Nov., 1889. 1889. pp. 437–484.  
New series, report no. 69. Crops of the year; and freight rates of transportation companies. Dec., 1889. 1889. pp. 485–548.

- 28 [V. 28.] Reports of Bureau of Statistics of Department of Agriculture  
(nos. 70–80) [Jan.–Dec., 1890]. 1891. viii+652 pp.

Contents:

Index. viii pp.  
New series, report no. 70. Numbers and values of farm animals; and freight rates of transportation companies. Jan. and Feb., 1890. 1890. pp. 1–64.  
New series, report no. 71. Distribution and consumption of corn and wheat; and freight rates of transportation companies. Mar., 1890. 1890. pp. 65–116.  
New series, report no. 72. Condition of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1890. 1890. pp. 117–174.  
New series, report no. 73. Condition of winter grain; progress of cotton planting; wages of farm labor; also, freight rates of transportation companies. May, 1890. 1890. pp. 175–230.  
New series, report no. 74. Acreage of wheat and cotton; condition of cereal crops; and freight rates of transportation companies. June, 1890. 1890. pp. 231–310.  
New series, report no. 75. Area of corn, potatoes, and tobacco; condition of growing crops; and freight rates of transportation companies. July, 1890. 1890. pp. 311–374.  
New series, report no. 76. Condition of growing crops; and freight rates of transportation companies. Aug., 1890. 1890. pp. 375–430.  
New series, report no. 77. Condition of crops in America and Europe; and freight rates of transportation companies. Sept., 1890. 1890. pp. 431–494.  
New series, report no. 78. Condition of crops; yield of grain per acre; and freight rates of transportation companies. Oct., 1890. 1890. pp. 495–542.  
New series, report no. 79. Yield of crops per acre; and freight rates of transportation companies. Nov., 1890. 1890. pp. 543–590.  
New series, report no. 80. Crops of the year; and freight rates of transportation companies. Dec., 1890. 1891. pp. 591–652.

- 29 [V. 29.] Reports of Bureau of Statistics of Department of Agriculture  
(nos. 81–91) [Jan.–Dec., 1891]. 9+698 pp.

Contents:

Index. 9 pp.  
New series, report no. 81. Numbers and values of farm animals; and freight rates of transportation companies. Jan. and Feb., 1891. 1891. pp. 1–56.  
New series, report no. 82. Distribution and consumption of corn and wheat; and freight rates of transportation companies. Mar., 1891. 1891. pp. 57–104.  
New series, report no. 83. Condition of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1891. 1891. pp. 105–158.  
New series, report no. 84. Condition of winter grain; progress of cotton planting; also, freight rates of transportation companies. May, 1891. 1891. pp. 159–238.  
New series, report no. 85. Acreage of wheat and cotton; condition of cereal crops; and freight rates of transportation companies. June, 1891. 1891. pp. 239–302.  
New series, report no. 86. Area of corn, potatoes, and tobacco; condition of growing crops; and freight rates of transportation companies. July, 1891. 1891. pp. 303–374.  
New series, report no. 87. Condition of growing crops; and freight rates of transportation companies. Aug., 1891. 1891. pp. 375–437.  
New series, report no. 88. Condition of crops in America and Europe; and freight rates of transportation companies. Sept., 1891. 1891. pp. 439–518.  
New series, report no. 89. Condition of crops; yield of grain per acre; and freight rates of transportation companies. Oct., 1891. 1891. pp. 519–590.  
New series, report no. 90. Yield of crops per acre; and freight rates of transportation companies. Nov., 1891. 1891. pp. 591–634.  
New series, report no. 91. Crops of the year; and freight rates of transportation companies. Dec., 1891. 1892. pp. 635–698.

**Tables**Classifica-  
tion no.**A27. STATISTICS DIVISION—Continued****A27.9: Statistical reports—Continued**

- 30 [V. 30.] Reports of Bureau of Statistics of Department of Agriculture (nos. 92-100) [Jan.-Dec., 1892]. 1892. vii+416 pp.
- Contents:  
Index. vii pp.  
New series, report no. 92. Numbers and values of farm animals; and freight rates of transportation companies. Jan. and Feb., 1892. 1892. pp. 1-44.  
New series, report no. 93. Distribution and consumption of corn and wheat; and freight rates of transportation companies. Mar., 1892. 1892. pp. 45-92.  
New series, report no. 94. Condition of winter grain; condition of farm animals; and freight rates of transportation companies. Apr., 1892. 1892. pp. 93-147.  
New series, report no. 95. Condition of winter grain; progress of cotton planting; also freight rates of transportation companies. May, 1892. 1892. pp. 149-196.  
New series, report no. 96. Acreage of wheat and cotton; condition of cereal crops; and freight rates of transportation companies. June, 1892. 1892. pp. 197-244.  
New series, report no. 97. Area of corn, potatoes, and tobacco; and condition of growing crops. July, 1892. 1892. pp. 245-272.  
Special report of Statistician, July, 1892; foreign crop reports and miscellaneous information; freight rates of transportation companies. 1892. pp. 273-296.  
New series, report no. 98. Report of the Statistician, Aug., 1892. Primary prices of farm products; foreign trade in agricultural products; European crop prospects for Aug.; consular notes on foreign agriculture; freight rates of transportation companies. 1892. pp. 297-327.  
[New series, report no. 98A.] Condition of growing crops, Aug., 1892. 1892. 16 pp.  
[New series, report no. 98B.] Same, Sept., 1892. 1892. 20 pp.  
[New series, report no. 98C.] Condition of growing crops and yield of grain per acre. Oct., 1892. 1892. 23 pp.  
New series, report no. 99. Report of Statistician, Sept. and Oct., 1892. Farm prices in two centuries; ramie machine trials in New Orleans; Indian wheat crop of 1892; notes of domestic and foreign trade and industry; European crop report for Sept.; freight rates of transportation companies. 1892. pp. 329-376.  
[New series, report no. 99A.] Yield of crops per acre; and product compared with last year. Nov., 1892. 1892. 16 pp.  
New series, report no. 100. Report of Statistician, Nov. and Dec., 1892. Agricultural production and distribution of world; tests of averages of condition; address of Statistician at annual meeting of P[atr]ons of H[us]bandry; reciprocity and agricultural exports; European crop report for Dec., 1892; and freight rates of transportation companies. 1892. pp. 377-416.  
[New series, report no. 100A.] Crops of the year, Dec., 1892. 1893. 28 pp.
- 31 [V. 31.] Reports of Bureau of Statistics of Department of Agriculture (nos. 101-111) [Jan.-Dec., 1893]. 1894. x+521 pp.
- Contents:  
Index. x pp.  
New series, report no. 101. Report of Statistician, Jan. and Feb., 1893. Agriculture in France; Hungarian milling; canning industry; tobacco experiments in Texas; European crop report for Feb.; farm animals of the world; freight rates of transportation companies. 1893. pp. 1-71.  
[New series, report no. 101A.] Number and value of farm animals; and cotton distribution. Jan.-Feb., 1893. 1893. 20 pp.  
New series, report no. 102. Report of Statistician, Mar. 1893. Agriculture in Alaska; foreign official crop estimates; European crop report; wheat crop of the world; freight rates of transportation companies. 1893. pp. 73-95.  
[New series, report no. 102A.] Distribution and consumption of corn and wheat, Mar., 1893. 1893. 16 pp.  
New series, report no. 103. Report of Statistician, Apr., 1893. 1893. [Contents: Condition of winter grain; notes concerning wheat; condition of farm animals; European crop report for March, 1893; transportation rates.] pp. 97-140.  
New series, report no. 104. Report of Statistician, May, 1893. 1893. [Contents: Condition of winter grain; mowing lands and pastures; progress of cotton planting; spring plowing; changes in crop areas; temperature and rainfall; notes from reports of State agents; the cotton crop of India for 1892-93; European crop report for May, 1893; transportation rates.] pp. 141-178.  
New series, report no. 105. Report of Statistician, June, 1893. 1893. [Contents: Crop report for June; agriculture in the Caucasus; the customs tariff in Martinique; agricultural produce statistics of the United Kingdom; transportation rates.] pp. 179-221.  
New series, report no. 106. Report of Statistician, July, 1893. 1893. [Contents: Crop report for July; statistics of Ontario; foreign import duties on wheat; notes on foreign agriculture; use of maize of United States in Mexico; transportation rates.] pp. 223-270.  
New series, report no. 107. Report of Statistician, Aug., 1893. 1893. [Contents: Crop report for Aug.; notes on foreign agriculture; wheat crop of India for 1893; production of corn in New South Wales; domestic and transatlantic freight rates.] pp. 271-322.  
New series, report no. 108. Report of Statistician, Sept., 1893. 1893. [Contents: Agricultural returns of Great Britain; Ontario crop report; crops in Germany; notes from United States consular officers in Scotland, France, Germany, Belgium, Cochin-China, and Ontario; domestic and transatlantic freight rates.] pp. 323-369.  
New series, report no. 109. Report of Statistician, Oct., 1893. 1893. [Contents: Notes from reports of State agents; imports of hay into United States; cereal crops of France and Italy for 1893; production, commerce, and consumption of wine in Italy; corn as feed for horses in Germany; reports from consular officers relating to crops in Germany, Scotland, New Brunswick, and Ontario; domestic and transatlantic freight rates.] pp. 371-414.



Classification  
no.**A27. STATISTICS DIVISION—Continued****A27.9: Statistical reports—Continued**

- 31 [V. 31.] Reports of Bureau of Statistics of Department of Agriculture, etc.—Continued  
Contents—Continued  
New series, report no. 110. Report of Statistician, Nov., 1893. 1893. [Contents: Notes from reports of State agents; imports of American wheat flour into Europe; hop crop of England for 1893; beet sugar production of Europe for 1893-94; agriculture in Great Britain and Ireland; notes from United States consular officers regarding crops in Ontario, Spain, Cochín-China, Korea, Scotland, and Egypt; domestic and transatlantic freight rates.] pp. 415-458.  
New series, report no. 111. Report on the crops of the year. Dec., 1893. 1894. pp. 459-521.
- 32 [V. 32.] Reports of Bureau of Statistics of Department of Agriculture (nos. 112-122) [Jan.-Dec.] 1894. 1895. xiii + 778 pp.  
Contents:  
Index. xiii pp.  
New series, report no. 112. Report of Statistician, Jan.-Feb., 1894. Report on farm animals; notes from reports of State agents; the cotton crop; agriculture in China; the sugar crop of the world; Germany as an importer of American agricultural products; the canning industry; notes on foreign agriculture; domestic and transatlantic freight rates. 1894. pp. 1-68.  
New series, report no. 113. Report of Statistician, Mar., 1894. Distribution and consumption of corn and wheat; supply and distribution of wheat for twenty-five years; wheat crop of the world; wholesale prices of principal agricultural products in all sections of U. S.; expense of raising wheat and corn; production of honey and beeswax; poultry and eggs; dairy products; official statistics of foreign crops; the world's wool supply; notes from U. S. consular officers and European agents; domestic and transatlantic freight rates. 1894. pp. 69-156.  
New series, report no. 114. Report of Statistician, Apr., 1894. Condition of winter grain; wheat production in census years since 1869; farm animals, condition and losses; increase and decrease in number and value of farm animals, 1880-1890; agricultural developments in Bosnia and Herzegovina; health of the people; cotton crop of India for 1893-94; reports of U. S. consular officers; transportation rates, 1894. pp. 157-218.  
New series, report no. 115. Report of Statistician, May, 1894. Temperature and rainfall; condition of winter grain; changes in crop area; world's supply and consumption of cotton; fruit-crop prospects in the U. S., May 1, 1894; agricultural production of Mexico for 1889 and 1892; agricultural statistics of Uruguay; Austrian cereal crops for 1893; Japanese cereal crops for 1893; European crop report; notes from U. S. consular officers; transportation rates. pp. 219-294.  
New series, report no. 116. Report of Statistician, June, 1894. Crop report for June; tariff rates on principal cereals and flour in European countries; notes on foreign agriculture; notes from U. S. consular officers; climate of Mexico; Mexican railways; transportation rates. 1894. pp. 295-394.  
New series, report no. 117. Report of Statistician, July, 1894. Crop report for July; notes on foreign agriculture; reports of U. S. consular officers; transportation rates. 1894. pp. 395-444.  
New series, report no. 118. Report of Statistician, August, 1894. Crop report for August; notes on foreign agriculture; production and consumption of rice in U. S.; commerce between U. S. and Mexico for years 1873, 1878, 1883, 1888, and 1893; transportation rates. 1894. pp. 445-536.  
New series, report no. 119. Report of Statistician, Sept., 1894. Crop report for Sept.; stock hogs; notes from reports of State agents; table showing condition of crops Sept. 1, 1894; urban population in South; notes on foreign agriculture; transportation rates. 1894. pp. 537-604.  
New series, report no. 120. Report of Statistician, Oct., 1894. Crop report for Oct.; notes from reports of State agents; table showing yield per acre and condition by States, Oct. 1, 1894; rice production in U. S.; notes on foreign agriculture; transportation rates. 1894. pp. 605-660.  
New series, report no. 121. Report of Statistician, Nov., 1894. Nov. crop report notes from reports of State agents; table showing estimated yield per acre of certain crops Nov. 1, 1894; notes on foreign agriculture; transportation rates. 1894. pp. 661-702.  
New series, report no. 122. Report of Statistician, Dec., 1894. Crops of the year; crop review; principal crops of 1894; farm prices and market quotations; agricultural exports and imports; official statistics of foreign crops; transportation rates. 1894. pp. 703-778.
- 33 [V. 33.] Reports of Bureau of Statistics of Department of Agriculture (nos. 123-133) [Jan.-Dec., 1895]. 1896. v. p.  
Contents:  
New series, report no. 123. Report of Statistician, Jan.-Feb., 1895. Farm animals; cotton crop; live stock in Great Britain and Ireland; cotton crop of India for 1894; a French congress on popular credit; wheat crop of Victoria (Australia); notes on foreign agriculture; Jan. transportation rates; Feb. transportation rates. 1895. pp. 1-58.  
New series, report no. 124. Report of Statistician, Mar., 1895. Distribution and consumption of wheat in U. S.; consumption of wheat per capita in U. S.; wheat crop of world; prices of wheat since 1865; wholesale prices of principal agriculture products, etc.; report of European agent; transportation rates. 1895. pp. 59-106.

**Tables**Classifica-  
tion no.**A27. STATISTICS DIVISION—Continued****A27.9: Statistical reports—Continued**

- 33 [V. 33.] Reports of Bureau of Statistics of Department of Agriculture, etc.—Continued  
Contents—Continued  
New series, report no. 125. Report of Statistician, Apr., 1895. Condition of winter wheat; farm animals; number of families occupying farms owned, free, and unincumbered; amount of incumbrance on farms; health of people; production, imports, and exports of potatoes; production and prices of food in Italy; potatoes and hay in Great Britain in 1894; cotton crop of India for 1894-95; rice crop of India for 1894; report of European agent; transportation charges. 1895. pp. ii+107-168.  
New series, report no. 126. Report of Statistician, May, 1895. Condition of winter grain; condition of cotton crop, 1894; prices of wheat in England; report of European agent; notes on foreign agriculture; transportation charges. 1895. pp. ii+169-230.  
New series, report no. 127. Report of Statistician, June, 1895. Crop report for June; cotton, increase and decrease of acreage 1895; temperature and rainfall; report of European agent; notes on foreign agriculture; transportation charges. 1895. pp. ii+231-284.  
New series, report no. 128. Crop report for July, 1895; report of European agent; transportation rates. n. t. p. 23 pp.  
New series, report no. 129. Crop report for August, 1895; report of European agent; transportation rates. n. t. p. 24 pp.  
New series, report no. 130. Crop report for September, 1895; report of European agent; transportation rates. n. t. p. 24 pp.  
New series, report no. 131. Crop report for October, 1895; report of European agent; transportation rates. n. t. p. 20 pp.  
New series, report no. 132. Crop report for November, 1895; transportation rates. n. t. p. 14 pp.  
New series, report no. 133. Crop report for December, 1895; Report of European agent; transportation charges. n. t. p. 36 pp. Index, 9 pp.
- 34 [V. 34.] Reports of Division of Statistics of Department of Agriculture (nos. 134-144) [Jan.-Dec.] 1896. 1897. v. p.  
Contents:  
Index, 6 pp.  
New series, report no. 134. Prices and numbers of farm animals; report of European agent. n. t. p. 8 pp.  
New series, report no. 135. Crop report for March, 1896. n. t. p. 16 pp.  
New series, report no. 135. Same, summary of cotton report for March, 1896. n. t. p. 4 pp.  
New series, report no. 136. Crop report for April, 1896. n. t. p. 7 pp.  
New series, report no. 137. Crop report for May, 1896. n. t. p. 8 pp.  
New series, report no. 138. Crop report for June, 1896. n. t. p. 4 pp.  
New series, report no. 139. Crop report for July, 1896. n. t. p. 8 pp.  
New series, report no. 140. Crop report for August, 1896. n. t. p. 8 pp.  
New series, report no. 141. Crop report for September, 1896. n. t. p. 7 pp.  
New series, report no. 142. Crop report for October, 1896. n. t. p. 7 pp.  
New series, report no. 143. Crop report for November, 1896. n. t. p. 4 pp.  
New series, report no. 144. Crop report for December, 1896. n. t. p. 16 pp.
- 35 [V. 35.] Publications of Division of Statistics of Department of Agriculture, Reports nos. 145 to 155; Circulars nos. 5-8. 1898. v. p.  
Contents:  
Index. vii pp.  
New series, report no. 145. Crop report for Jan.-Feb., 1897. n. t. p. 7 pp.  
New series, report no. 146. Crop report for March, 1897. n. t. p. 4 pp.  
New series, report no. 147. Crop report for April, 1897. n. t. p. 8 pp.  
New series, report no. 148. Crop report for May, 1897. n. t. p. 4 pp.  
New series, report no. 149. Crop report for June, 1897. n. t. p. 4 pp.  
New series, report no. 150. Crop report for July, 1897. n. t. p. 8 pp.  
New series, report no. 151. Crop report for August, 1897. n. t. p. 7 pp.  
New series, report no. 152. Crop report for September, 1897. n. t. p. 4 pp.  
New series, report no. 153. Crop report for October, 1897. n. t. p. 4 pp.  
New series, report no. 154. Crop report for November, 1897. n. t. p. 4 pp.  
New series, report no. 155. Crop report for December, 1897. n. t. p. 30 pp.  
Circular No. 5. Local taxation as affecting farms. 1897. 16 pp.  
Circular No. 6. Cereal crops of 1896. n. t. p. 12 pp.  
Circular No. 7. Cotton crop of 1896. n. t. p. 4 pp.  
Circular No. 8. Cotton crops of 1896-97. n. t. p. 14 pp.
- 36 [V. 36] No. 156. Report on condition of winter grain on April 1, 1899, and losses of farm animals during year ending Mar. 31, 1899, with statistics of foreign crops. n. t. p. 38 pp.  
[Discontinued.]
- A27.9<sup>a</sup>: Statistical reports (separates)**
- F94 Fruit-crop prospects in U. S. May 1, 1894. n. t. p. pp. 251-253.  
[Reprinted from New series, report no. 115 of Statistician.]



## A28. VEGETABLE PHYSIOLOGY AND PATHOLOGY DIVISION

[Formerly Division of Vegetable Pathology. Merged into Bureau of Plant Industry July 1, 1901. See A19. For historical sketch of Division see Yearbook 1897 (A1.10:897), p. 99.]

Classifica-  
tion no.

### A28.1: Annual reports

- REPORT OF THE MYCOLOGIST**
- 886 1886 (Scribner) [1]+95-138 pp. 8 pl. 3 maps. 1 diagram. (Also in A1.1:886, p. 95.)
- REPORT OF CHIEF OF SECTION OF VEGETABLE PATHOLOGY**
- 887 1887 (Scribner), 323-397 pp. 17 pl. (Also in A1.1:887, p. 323.)
- 888 1888 (Galloway), iv+325-404+iii pp. 19 pl. 1 map. (Also in A1.1:888, p. 325.)
- 889 1889 (Galloway), [1]+397-432 pp. 2 pl. (Also in A1.1:889, p. 397.)
- REPORT OF CHIEF OF DIVISION OF VEGETABLE PATHOLOGY**
- 890 1890 (Galloway), [1]+398-408 pp. 5 pl. (Also in A1.1:890, p. 393.)
- 891 1891 (Galloway), [1]+359-378 pp. 3 pl. (Also in A1.1:891, p. 359.)
- 892 1892 (Galloway), [1]+215-246 pp. 4 pl. (Also in A1.1:892, p. 215.)
- 893 1893 (Galloway), iii+245-276 pp. (Also in A1.1:893, p. 245.)
- 1894 (Galloway). (In A1.1:894, p. 143.)
- REPORT OF CHIEF OF DIVISION OF VEGETABLE PHYSIOLOGY AND PATHOLOGY**
- 896 1896 (Galloway). (In A1.1:895, p. 169.)
- 897 1897 (Galloway), iii+15-22 pp. (Also in A1.1:896, p. 15.)
- 898 1897 (Galloway), iii+7-13 pp. (Also in A1.1:897, p. 7.)
- 899 1898 (Woods), iii+27-36 pp. (Also in A1.1:898, p. 27.)
- 900 1899 (Galloway), iii+71-83 pp. (Also in A1.1:899, p. 71.)
- 1900 (Galloway), ii+49-58 pp. (Also in A1.1:900, p. 49.)
- 1901 (Woods). [This final report of the division was made through the chief of the Bureau of Plant Industry, forming part of his annual report for 1901. (See A1.1:901, p. 46; also A19.1:901, p. 46.)]

### A28.2: General publications

None issued.

### A28.3: Bulletins

- 1 No. 1. Additional evidence on communicability of peach yellows and peach rosette; by Erwin F. Smith. 1891. 65 pp. 39 pl.
- 2 No. 2. California vine disease, preliminary report of investigations; by Newton B. Pierce. 1892. 222 pp. 25 pl. 2 charts.
- 3 No. 3. Experiments made in 1891 in treatment of plant diseases; by B. T. Galloway. 1892. 76+[1] pp. 8 pl.
- 4 No. 4. Experiments with fertilizers for prevention and cure of peach yellows, 1889-92; by Erwin F. Smith. 1893. 197 pp. 33 pl.
- 5<sup>1</sup> No. 5. Pollination of pear flowers; by Merton B. Waite. 1894. 110 pp. 12 pl.
- 5<sup>2</sup> Same, [2d edition.] 1895. 110 pp. 12 pl.
- 6 No. 6. Bordeaux mixture as a fungicide; by D. G. Fairchild. 1894. 55 pp.
- 7 No. 7. Effect of spraying with fungicides on growth of nursery stock; by B. T. Galloway. 1894. 41 pp.
- 8 No. 8. Principal diseases of citrus fruits in Florida; by Walter T. Swingle and Herbert J. Webber. 1896. 42 pp. 8 pl.
- 9 No. 9. Bordeaux mixture, its chemistry, physical properties, and toxic effects on fungi and algæ; by Walter T. Swingle. 1896. 37 pp.
- 10 No. 10. Copper sulphate and germination, treatment of seed with copper sulphates to prevent attacks of fungi; by Walter H. Evans. 1896. 24 pp.
- 11 No. 11. Legal enactments for restriction of plant diseases, compilation of laws of U. S. and Canada; by Erwin F. Smith. 1896. 45 pp.
- 12 No. 12. Bacterial disease of tomato, eggplant, and Irish potato; by Erwin F. Smith. 1896. 28 pp. 2 pl.
- 13 No. 13. Sooty mold of orange and its treatment; by Herbert J. Webber. 1897. 44 pp. 5 pl.
- 14 No. 14. Bermuda lily disease, preliminary report of investigations; by Albert F. Woods. 1897. 15 pp.

## Tables

Classifica-  
tion no.

## A28. VEGETABLE PHYSIOLOGY AND PATHOLOGY DIVISION—Continued

### A28.3: Bulletins—Continued

- 15 No. 15. Some edible and poisonous fungi; by W. G. Farlow. 1898. iii+453-470 pp. 10 pl.  
[Reprinted from Yearbook, 1897.]
- 16 No. 16. Cereal rusts of United States, a physiological investigation; by Mark Alfred Carleton. 1899. 74 pp. 4 pl.
- 17 No. 17. Wilt disease of cotton, watermelon, and cowpea; by Erwin F. Smith. 1899. 72 pp. 10 pl.
- 18 No. 18. Physiological rôle of mineral nutrients; by Oscar Loew. 1899. 60 pp.
- 19 No. 19. Stigmonose: a disease of carnations and other pinks; by Albert F. Woods. 1900. 30 pp. 3 pl.
- 20 No. 20. Peach leaf curl, its nature and treatment; by Newton B. Pierce. 1900. 204 pp. 30 leaves. 30 pl.
- 21 No. 21. Two diseases of red cedar, caused by *Polyporus juniperinus* n. sp. and *Polyporus carneus* nees; preliminary report; by Hermann von Schrenk. 1900. 22 pp. 7 pl.
- 22 No. 22. Xenia, or immediate effect of pollen, in maize; by Herbert J. Webber. 1900. 44 pp. 4 pl.
- 23 No. 23. Spot disease of violet (*Alternaria violæ* n. sp.); by P. H. Dorsett. 1900. 16 pp. 7 pl.
- 24 No. 24. Basis for improvement of American wheats; by Mark Alfred Carleton. 1900. 87 pp. 11 pl.
- 25 No. 25. Some diseases of New England conifers, preliminary report; by Hermann von Schrenk. 1900. 56 pp. 15 pl.
- 26 No. 26. Wakker's hyacinth germ *Pseudomonas hyacinthi* (Wakker); by Erwin F. Smith. 1901. 45 pp. 1 pl.  
Same, 56th Cong., 1st sess., H. doc. 694; serial no. 4000.
- 27 No. 27. Wilt disease of cotton and its control; by W. A. Orton. 1900. 16 pp. 4 pl.
- 28 No. 28. Cultural characters of *Pseudomonas hyacinthi*, *Ps. campestris*, *Ps. phaseola*, and *Ps. stewarti*, four one-flagellate yellow bacteria parasitic on plants; by Erwin F. Smith. 1901. 153 pp.
- 29 No. 29. Plant breeding; by Willet M. Hays. 1901. 72 pp. 6 pl.

### A28.4: Circulars

- 1 [No. 1.] Treatment of downy grape mildew and black-rot [of grape]. [May, 1886.] n. t. p. 3 pp.
- 2 [No. 2. Grapevine mildew and black-rot.] May 11, 1886. n. t. p. 3 pp.
- 3 No. 3. Treatment of downy mildew and black-rot of grape; by Norman J. Colman. April, 1887. 2 pp. 4°.
- 4 No. 4. Treatment of potato and tomato for blight and rot; by F. Lamson-Scribner. July 2, 1887. [3] pp. 4°.
- 5 No. 5. Fungicides, or remedies for plant diseases; by F. Lamson-Scribner. Apr. 25, 1888. n. t. p. 10 pp.
- 6 No. 6. Treatment of black-rot of grape; by B. T. Galloway. n. d. n. t. p. 3 pp.
- 7 No. 7. Grape-vine diseases; by B. T. Galloway. n. d. n. t. p. [4] pp.
- 8 No. 8. Experiments in treatment of pear leaf-blight and apple powdery mildew; [by B. T. Galloway]. n. p. [1889] 11 pp.
- 9 No. 9. Root-rot of cotton, circular of inquiry; by J. M. Rusk. n. d. n. t. p. [4] pp.
- 10 No. 10. Treatment of nursery stock for leaf-blight and powdery mildew; by B. T. Galloway. 1891. 8 pp.
- 11 No. 11. [Questions regarding black-rot, downy mildew, and anthracnose of grape; by Edwin Willits.] n. d. (Circ.)
- 12 No. 12. [Questions asked and specimens of straw and stubble of wheat, oats, rye, and barley solicited; by J. M. Rusk.] n. d. (Circ.)
- 13 No. 13. [Letter of inquiry relative to leaf curl of peach trees; by Edwin Willits.] Nov. 25, 1893. [3] pp. 4°
- 14 No. 14. [Letter of inquiry relative to grain rusts, requesting specimens of rusted wheat, oats, rye, and barley; by Chas. W. Dabney.] Feb. 23, 1894. (Circ.)

## A28. VEGETABLE PHYSIOLOGY AND PATHOLOGY DIVISION—Continued

Classifica-  
tion no.

### A28.4: Circulars—Continued

- 15 No. 15. Treatment for sooty mold of orange; by H. J. Webber. Jan. 2, 1895. n. t. p. 4 pp.
- 16 No. 16. Danger of introducing a Central American coffee disease into Hawaii; by Walter T. Swingle. July 26, 1898. 4 pp.
- ✓ 17 No. 17. New spraying devices; by B. T. Galloway. April 5, 1899. n. t. p. 4 pp.
- 18 No. 18. New wheat industry for semi-arid west; by Mark Alfred Carleton. June 28, 1901. n. t. p. 8 pp.

### A28.5: Journal of mycology

[Devoted to study of fungi, especially in their relation to plant diseases.]

V. 1-4. (Not Government publications.)

QUARTERLY BULLETIN.

- 5 V. 5. Nos. 1-[4]. Mar., June, Sept., [Dec.], 1889. v+5-249 pp. 14 p.

PERIODICAL BULLETIN.

- 6 V. 6. Nos. 1-4. May, Sept., 1890; Jan., Apr., 1891. iv+207 pp. 18 pl.

- 7 V. 7. Nos. 1-4. Sept., 1891; May, 1892; May, 1893; Aug., 1894. v+iii+478 pp. 38 pl.

[Discontinued.]

### A28.5a: Journal of mycology (separates)

[A few of the more important papers contained in the volumes were issued separately.]

## A29. WEATHER BUREAU

[For historical sketch of Bureau, see Yearbook, 1897 (A1.10:897), p. 59.]

### A29.1: Annual reports

[From 1891 to 1895 the report was in two parts, the administrative, which was printed as part of the Annual Report of the Secretary of Agriculture, and also issued separately in pamphlet form, and the "Meteorological data," a continuation of the series issued by the Signal Office, War Dept., bound in quarto cloth volumes. Beginning with 1896, the two were combined in one volume, an abbreviation of the administrative portion also appearing in the Secretary's report and in a separate pamphlet, 8°]

- 891<sup>1</sup> 1891 [Pt. 1]. Special report of Chief of Weather Bureau to Secretary of Agriculture, [July to Oct.] 1891. 1891. 26 pp.

- 891<sup>2</sup> 1891 [Pt. 2]. [Administrative] report of Chief of Weather Bureau for 1891; by Mark W. Harrington. 1892. iii+539-631+iii pp. 4 pl. (Also in A1.1: 891, p. 539.)

- 891<sup>3</sup> 1891 [Pt. 3]. Report of Chief of Weather Bureau, 1891-92. [Meteorological tables, 1891 and 1892.] 1893. 528 pp. 4 pl. 4° (Calendar years.)

Same, 52d Cong. 2d sess., II. mis. doc. 107, serial no. 3126.

- 892 1892. [Administrative] report of Chief of Weather Bureau for 1892; by Mark W. Harrington. 1893. iv+551-626+ii pp. (Calendar year.) (Also in A1.1: 892, p. 551.)

[For meteorological tables, 1892 (calendar year), see A29.1:891<sup>3</sup>.]

- 893<sup>1</sup> 1893 [Pt. 1]. [Administrative] report of Chief of Weather Bureau for 1893; by Mark W. Harrington. 1894. iii+89-122 pp. 4 pl. (Also in A1.1: 893, p. 89.)

- 893<sup>2</sup> 1893 [Pt. 2]. Report of Chief of Weather Bureau, 1893. [Meteorological tables, 1893 (calendar year).] 1894. 319 pp. 4°

- 894 1894. Report of Chief of Weather Bureau, 1894. [Meteorological tables, 1894 (calendar year).] 1895. 288 pp. 4°

Same, 53d Cong., 3d sess., H. mis. doc. 88; serial no. 3339.

[For administrative report (fiscal year) see A1.1:894, p. 77.]

- 895 1895. Report of Chief of Weather Bureau for 1895, by Willis L. Moore. 1895. iii+65-96 pp. (Also in A1.1:895, p. 65.)

[For meteorological tables, 1895 (calendar year), see A29.1:896.]

## Tables

Classifica-  
tion no.

## A29. WEATHER BUREAU—Continued

### A29.1: Annual reports—Continued

- 896 1896. Report of Chief of Weather Bureau, 1895-96 (fiscal year). [With meteorological tables, 1895 (calendar year).] 1895. xl+266 pp. 8 charts. 4°  
Same, 54th Cong., 1st sess., H. doc. 428; serial no. 3453.  
[The administrative portion of the report, rearranged, is also in A1.1:896, p. 243.]
- 897 1897. Report of Chief of Weather Bureau, 1896-97 (fiscal year). [With meteorological tables, 1896 (calendar year).] 1897. x+431 pp. 22+11 charts. 61 pl. 2 il.  
Same, 55th Cong., 2d sess., H. doc. 166; serial no. 3670.  
[Administrative portion of report, also in A1.1:897, p. 199.]
- 898 1898. Report of Chief of Weather Bureau, 1897-98 (fiscal year). [With meteorological tables, 1897 (calendar year).] 1899. 338 pp. 7 pl. 21 charts. 9 diagrams.  
Same, 55th Cong., 3d sess., H. doc. 270; serial no. 3820.  
[Administrative portion of report, also in A1.1:898, p. 208.]
- 899<sup>1</sup> 1899. Report of Chief of Weather Bureau, 1898-99, vol. 1 (fiscal year). [With meteorological tables, 1898 (calendar year).] 1900. v+247 pp. 4°
- 899<sup>2</sup> Same, vol. 2. [Report on international cloud observations, May 1, 1896, to July 1, 1897; prepared by Frank H. Bigelow.] 1900. 787 pp. 79 charts. 4°  
Same, 56th Cong., 1st sess., H. doc. 660, pts. 1 and 2; serial nos. 3998 and 3999.  
[Administrative portion of report, also in A1.1:899, p. 9.]
- 900 1900. Report of Chief of Weather Bureau, 1899-1900 (fiscal year). [With meteorological tables, 1899 (calendar year).] 1901. 436 pp. 4°  
Same, 56th Cong., 2d sess., H. doc. 517; serial no. 4177.  
[Administrative portion of report, also in A1.1:900, p. 7.]
- 901<sup>1</sup> 1901. Report of Chief of Weather Bureau, 1900-1901 (fiscal year), vol. 1. [With meteorological tables, 1900 (calendar year).] 1901. 318 pp. 4°  
Same, 57th Cong., 1st sess., H. doc. 19, pts. 1 and 2; serial nos. 4319 and 4320.  
[Administrative portion of report, also in A1.1:901, p. 3.]
- 901<sup>2</sup> Same, v. 2. [Report on barometry of U. S., Canada, and West Indies; by Frank H. Bigelow.] 1902. [1]+1005 pp., 222 charts.
- 902 1902. Report of Chief of Weather Bureau, 1901-1902 (fiscal year). [With meteorological tables, 1901 (calendar year).] 1902. xxvii+342 pp. 5 charts.  
Same, 57th Cong., 2d sess., H. doc. 19; serial no. 4485.  
[Administrative portion of report, also in A1.1:902, p. 3.]

### A29.1<sup>a</sup>: Annual reports (separates)

[The various series of tables, designated as "parts" in the volumes, are also issued separately.]

### A29.2: General publications

- Al 1 Alaska. The climate of Alaska; by Willis L. Moore. 1897. 2 l. 4°
- Ar4 Arid regions. Some climatic features of arid regions; communicated to National Irrigation Congress at its 5th annual session, Phoenix, Ariz., Dec. 15-17, 1896; by Willis L. Moore. 1896. 19 pp. 3 charts.
- At6<sup>1</sup> Atmospheric circulation in tropical cyclones, as shown by movements of clouds; by H. B. Boyer. [1896.] 17 pp. 17 pl.
- At6<sup>2</sup> Atmospheric survey. U. S. daily atmospheric survey; by W. L. Moore. 1897. n. t. p. 6 pp.
- B73 Brazos River flood bulletin. July 15, 1889. (Map.)
- C38 Charts showing daily river stages in feet. 1892. 19 x 24 in.
- C49 Cipher code of wind signal orders, amending instructions to special display men. Nov., 1892. 10 pp.

## A29. WEATHER BUREAU—Continued

Classification  
no.

## A29.2: General publications—Continued

- C61<sup>1</sup> Climate and Health (monthly periodical). [Announcing discontinuance of publication of Climate and Health.] June 22, 1896. (Circ.)
- C61<sup>2</sup> Climatic charts of U. S., 1900. [26 charts bound.]  
[Each chart was originally issued separately.]
- C62<sup>1</sup> Cloud forms. Description of cloud forms. n. d. (Chart.)
- C62<sup>2</sup> Same, 2d edition. n. d.
- C62<sup>3</sup> Same, 3d edition. n. d.
- C62<sup>4</sup> Same, 4th edition. n. d.
- C93 Current chart of Great Lakes. 1892. Probable currents of Great Lakes [deduced from bottle paper observations]. 1893. 24 x 34 in. (Chart.)
- C99 Cyclones. Development and movement of cyclones, as shown in morning and evening weather maps Apr. 2-6, 1892; prepared by C. F. Marvin. 1893. [18] pp. Oblong l. 8°
- D14 Dakotas. Certain climatic features of two Dakotas; by John P. Finley. 1893. 206 pp. 89 pl. 4°  
Same, 52d Cong., 1st sess., S. ex. doc. 157; serial no. 2893.
- D51 Dew-point. Tables for obtaining temperature of dew-point, relative humidity, etc. [From instructions to voluntary observers. 1892. In A29.12:V88.] 1897. pp. 66-98. (c. t. o.)
- F76 Forecaster and newspaper; by Harvey Maitland Watts. 1901. 22 pp.
- F92 Frost. Injury and methods of protection from frost; by W. H. Hammon. 1896. 12 pp. (For revised ed., see A29.3:23.)
- F94 Fruits. Protection of fruits, vegetables, and other food products, from injury by heat or cold during transportation; by Mark W. Harrington. Aug. 22, 1894. n. t. p. 7 pp.
- G81<sup>1</sup> Great Lakes. Display of wind signals on Great Lakes. 1895. (Circular of information.) 13 pp. 1 pl.
- G81<sup>2</sup> Same. 1896. 18 pp. 1 pl.
- G81<sup>3</sup> Great Lakes. Wreck chart of Great Lakes. 1886-91. (Broadside.)
- G81<sup>4</sup> Same. 1886-93. (Broadside.)
- G81<sup>5</sup> Great Lakes. Wrecks which occurred on Great Lakes Dec. 17, 1885, to Nov. 15, 1893. 1894. 22 pp.
- G81<sup>6</sup> Great Lakes. Wrecks and casualties on Great Lakes during 1895, 1896, 1897; by Norman B. Conger. 1898. 23 pp.
- G81<sup>7</sup> Great Lakes. Wreck and casualty chart of Great Lakes. 1894. (Broadside.)
- G81<sup>8</sup> Great Lakes. Section map of Great Lakes. [1892.] Chart 19 x 24 inches,
- H94 Hurricane of Aug. 13-16, 1901, on Louisiana and Mississippi coasts. Special report on. [1901.] n. t. p. 6 pp.
- In8 [International symbols recommended for use by Meteorological Congress, Munich, 1892; by Mark W. Harrington.] Jan. 1, 1894. n. t. p. 5 pp.
- L15 Lake levels. Variations in lake levels and atmospheric precipitation; by Alfred J. Henry. 1899. 8 pp.
- L62<sup>1</sup> Lightning. Protection from lightning; by Alexander McAdie. 1894. (Circular of information.) 20 pp. 11 pl.
- L62<sup>2</sup> Same. 2d edition. 1894. 21 pp. 6 pl.
- L62<sup>3</sup> Same. 3d edition. 1894. 21 pp. 6 pl.  
See, for 4th ed., A29.3:15.
- N27 Nebraska. Departures from normal temperature and rainfall with crop yields in Nebraska; by H. H. C. Dunwoody. 1896. 30 pp. 4°
- N81 North Pacific coast weather map. Explanation of North Pacific coast weather map; by Willis L. Moore. 4 pp. 16°
- P11 Pacific slope. Weather forecasting and weather types on North Pacific slope; by B. S. Pague and S. M. Blandford, Portland, Oreg. 1897. 29+[1] pp.
- P19 Pan-American Exposition weather maps; with special color-printed envelope. [1901.] (Broadside.)
- P21 Paris. Responses to programme of questions proposed for discussion at Paris International Meteorological Congress, Sept., 1896. 1896. 29 pp.
- P91<sup>1</sup> Precipitation. Details of precipitation (rain and melted snow) at stations in Nebraska and South Dakota. Mar. 6, 1894. 33 pp.\*

\* No copy found.

## Tables

Classification  
no.

## A29. WEATHER BUREAU—Continued

### A29.2: General publications—Continued

- P91<sup>2</sup> Precipitation. Tables of daily precipitation at special river and rainfall stations of U. S. Weather Bureau, for 1893, 1894, 1895. 1900. [2] + 256 pp.
- P91<sup>3</sup> Precipitation. Table showing depth of precipitation corresponding to given weights. [1892.] card. 12°.
- P95 Psychrometric tables for obtaining vapor pressure, relative humidity, and temperature of dew-point; prepared by C. F. Marvin. 1900. 84 pp.
- R13<sup>1</sup> Rainfall chart. Lines of equal time of water travel at Cairo, Ill. [1892.] 22 x 28 in.
- R13<sup>2</sup> Rainfall laws, deduced from twenty years' observations; by Gustavus Hinrichs. Weather Bureau, 1893. 94 pp.
- R52<sup>1</sup> River and flood service. Chart of river and flood service. 1897.
- R52<sup>2</sup> River and flood service charts, showing area covered by water of Mississippi River in April, 1897. 1897.\*
- Sa2 St. Marys Falls Canal. Relation of certain atmospheric changes to changes in water level in St. Marys Falls Canal. 1894. n. t. p. 2 pp. 4°
- Si2<sup>1</sup> Signal Service. Statement of expenditures of Signal Service and Weather Bureau. 1893. 3 pp.
- Si2<sup>2</sup> Same. 1895. 3 pp. 4°
- Su7<sup>1</sup> Sunshine. Table of monthly amounts of possible sunshine for hours ending shortly after sunrise (and) sunset. 1894. 2 pp. card.
- Su7<sup>2</sup> Sunshine table 1. Local time of sunrise and sunset for north latitudes, from 25° to 49°, inclusive. 2 pp. card.
- T11 Tables for dividing by 672, 720, 744, 56, 60, 62. Records Division, Weather Bureau. 1893. 15 pp.
- T34 Thermometer scales. Comparison of thermometer scales. [1892.] card.
- T43<sup>1</sup> Thunderstorm observations. [Circular of instructions.] [1892.] 2 pp.
- T43<sup>2</sup> Same. [1893.] 2 pp.
- W37<sup>1</sup> Weather Bureau. [Its history and work.] 1901. 15 pp. 24°  
[For distribution at Pan-American Exposition.]
- W37<sup>2</sup> Weather charts. Explanation of weather charts. (Single sheet.) [1892.] f°
- W37<sup>3</sup> Weather code, Dec. 1, 1892. 1892. 93 pp. 4°
- W37<sup>4</sup> Same, Dec. 1, 1896. 1896. 116 pp. 4°
- W37<sup>5</sup> Same, Mar. 1, 1902. 1902. 93 pp. 4°
- W37<sup>6</sup> Weather map. Explanation of weather map; by Willis L. Moore. 3 pp. 16°
- W37<sup>7</sup> Weather map, Dec. 13-16, 1893. [Wall map, 52 x 56 in.] 1894.

### A29.3: Bulletins

- 1 No. 1. Notes on climate and meteorology of Death Valley, California; by Mark W. Harrington. 1892. 50 pp.
- 2 No. 2. Notes on new method for discussion of magnetic observations; by Frank H. Bigelow. 1892. 40 pp. 1 pl.
- 3 No. 3. Relations of soil to climate; by E. W. Hilgard. 1892. 59 pp.
- 4 No. 4. Some physical properties of soils in their relation to moisture and crop distribution; by Milton Whitney. 1892. 90 pp.
- 5 No. 5. Observations and experiments on fluctuations in level and rate of movement of ground water on Wisconsin Agricultural Experiment Station farm, and at Whitewater, Wis.; by Franklin H. King. 1892. 75 pp. 6 pl.
- 6 No. 6. Diurnal variation of barometric pressure; by Frank N. Cole. 1892. 32 pp.
- 7 No. 7. Report of first annual meeting of American Association of State Weather Services. 1893. 49 pp.
- 8 No. 8. Climatology of cotton plant; by P. H. Mell. 1893. 68 pp. 1 pl.
- 9 No. 9. Forecasting of thunderstorms during summer of 1893; by N. B. Conger. 1893. 54 pp. 6 pl.
- 10 No. 10. Climate of Chicago; by Henry A. Hazen. 1893. 137 pp. 4 pl.

\* No copy found.



Classification  
no.

**A29. WEATHER BUREAU—Continued**

**A29.3: Bulletins—Continued**

- 11<sup>1</sup> No. 11. Report of International Meteorological Congress, Chicago, Aug. 21-24, 1893, under auspices of Congress Auxiliary of World's Columbian Exposition; edited by Oliver L. Fassig. [pt. 1.] 1894. xv+206 pp. 10 pl.
- 11<sup>2</sup> Same, pt. 2. 1895. [4]+xv-xvi+207-583 pp. 15 pl.
- 11<sup>3</sup> Same, pt. 3. 1896. [2]+xvii-xxi+585-772 pp. 18 pl.
- 12 No. 12. Condensation of atmospheric moisture; by Carl Barus. 1895. 104 pp.
- 13<sup>1</sup> No. 13. Temperatures injurious to food products in storage and during transportation, and methods of protection from same; by H. E. Williams. 1894. 20 pp.
- 13<sup>2</sup> Same, [2d edition]. 1896. 20 pp.
- 14 No. 14. Report of third annual meeting of American Association of State Weather Services, [Brooklyn]. 1894. 31 pp.
- 15 No. 15. Protection from lightning; by A. McAdie. [4th edition revised.] 1895. 26 pp. 8 pl.  
See for 1st-3d eds., A29.2: L62.
- 16 No. 16. Determination of relative quantities of aqueous vapor in atmosphere, by means of absorption lines of the spectrum; by L. E. Jewell. 1896. 12 pp. 2 pl.
- 17 No. 17. Work of Weather Bureau in connection with rivers of United States. 1896. 106 pp. 4 pl.
- 18 No. 18. Report of fourth annual meeting of American Association of State Weather Services, Indianapolis, Ind., Oct. 16, 17, 1895. 1896. 55 pp.
- 19 No. 19. Report on relative humidity of southern New England and other localities; by Alfred J. Henry. 1896. 23 pp. 4 pl.
- 20 No. 20. Storms, storm tracks, and weather forecasting; by Frank H. Bigelow. 1897. 87 pp.
- 21 No. 21. Abstract of report on solar and terrestrial magnetism, in their relations to meteorology; by Frank H. Bigelow. 1898. 176 pp. 9 pl.
- 22 No. 22. Climate of Cuba, also Note on weather of Manila; by W. F. R. Phillips. 1898. 23 pp.
- 23 No. 23. Frost: when to expect it and how to lessen the injury therefrom; by W. H. Hammon. [Revised ed.] 1899. 37 pp.  
See for 1st ed. A29.2:F92.
- 24 No. 24. Proceedings of convention of Weather Bureau officials, Omaha, Nebr., Oct. 13, 14, 1898; edited by James Berry. 1899. 184 pp. 1 pl.
- 25 No. 25. Weather forecasting: some facts historical, practical, and theoretical; by Willis L. Moore. 1899. 16 pp.
- 26 No. 26. Lightning and electricity of air; [articles] by Alexander G. M'Adie and Alfred J. Henry. 2 pts. in 1. 1899. 74 pp. 4 pl.
- 27 No. 27. Probable state of sky along path of total eclipse of sun, May 28, 1900, observations of 1899; by Frank H. Bigelow. 1899. 23 pp. 4 charts.
- 28 No. 28. Climate of San Francisco, Cal.; by Alexander G. M'Adie and George H. Willson. 1899. 30 pp. 2 pl.
- 29 No. 29. Frost fighting; by Alexander G. McAdie. 1900. 15 pp. 6 pl.
- 30 No. 30. Loss of life in U. S., by lightning; by Alfred J. Henry. 1901. 21 pp. 4 pl.
- 31 No. 31. Proceedings of 2d convention of Weather Bureau officials, held at Milwaukee, Wis., Aug. 27-29, 1901; edited by James Berry and W. F. R. Phillips. 1902. 246+[1] pp. 38 pl.
- 32 No. 32. Hurricanes, especially those of Porto Rico and St. Kitts; by William H. Alexander. 1902. 79 pp.

**A29.3<sup>a</sup>: Bulletins (separates)**

[Some of the articles in the Bulletins are issued separately.]

**A29.4: Circulars**

None issued.



# Tables

Classification  
no.

## A29. WEATHER BUREAU—Continued

### A29.5: Bulletins (lettered)

- A A. Summary of international meteorological observations; by H. H. C. Dunwoody. 1893. 10 leaves. 53 pl. eleph f°
- B<sup>1</sup> B. Currents of Great Lakes, as deduced from movements of bottle papers, during seasons of 1892 and 1893; by Mark W. Harrington. 1894. 6 leaves. 6 pl. eleph. f°
- B<sup>2</sup> Same, revised edition. 1895. 14 pp. 6 pl. eleph. f°
- C<sup>1</sup> C. Rainfall and snow of United States, compiled to end 1891, with annual, seasonal, monthly, and other charts; by Mark W. Harrington. 1894. 80 pp. 4°.
- C<sup>2</sup> Same, Atlas. 1894. 25 pl. eleph. f°
- D D. Rainfall of United States, with annual, seasonal, and other charts; by Alfred J. Henry. 1897. 58 pp. 15 pl.
- E E. Floods of Mississippi River; by Park Morrill. 1897. vi+79 pp. 58 pl. 4°
- F F. Vertical gradients of temperature, humidity, and wind direction. Preliminary report on kite observations of 1898; by H. C. Frankfield. 1899. 71 pp. 7 pl. 4°
- G G. Atmospheric radiation, a research conducted at Allegheny Observatory and at Providence, R. I.; submitted to Chief of Weather Bureau by Frank W. Very. 1900. 134 pp. 4°
- H H. West Indian hurricanes; by E. B. Garriott. 1900. iii+69 pp., 7 charts. 4°
- I I. Eclipse, meteorology, and allied problems; by Frank H. Bigelow. 1902. 166 pp. 43 charts. 4°
- J J. Wind velocity and fluctuations of water level on Lake Erie; by Alfred J. Henry. 1902. 22 pp. 25 pl.

### A29.6: Monthly weather review

[Vols. 1-18 and nos. 1-6 of vol. 19 issued by Signal Service, War Department, W42.20: The chart numbers are given as they appear on the publications, regardless of the fact that they are printed on both sides of a page.]

- 19 V. 19. [1891] n. t. p.
  - No. 7. July. pp. 155-179. 4 ch. 1 pl.
  - No. 8. Aug. pp. 181-207. 4 ch. 1 pl.
  - No. 9. Sept. pp. 209-232+ix. 4 ch. 1 pl.
  - No. 10. Oct. pp. 233-258. 5 ch. 1 pl.
  - No. 11. Nov. pp. 259-287. 7 ch.
  - No. 12. Dec. pp. 289-330+x. 13 ch.
- 20 V. 20. [1892] n. t. p.
  - No. 1. Jan. pp. 1-31. 7 ch.
  - No. 2. Feb. pp. 33-59. 7 ch.
  - No. 3. Mar. pp. 61-87. 7 ch.
  - No. 4. Apr. pp. 89-116. 5 ch.
  - No. 5. May. pp. 117-147. 5 ch.
  - No. 6. June. pp. 149-178. 4 ch.
  - No. 7. July. pp. 179-206. 4 ch.
  - No. 8. Aug. pp. 207-234. 4 ch.
  - No. 9. Sept. pp. 235-260. 4 ch.
  - No. 10. Oct. pp. 261-288. 5 ch.
  - No. 11. Nov. pp. 289-318. 6 ch.
  - No. 12. Dec. pp. 319-346+10. 7 ch.
- 21 V. 21. 1893. Washington, D. C., Weather Bureau. 1894.
  - No. 1. Jan. pp. 1-30. 9 ch.
  - No. 2. Feb. pp. 31-60. 8 ch.
  - No. 3. Mar. pp. 61-90. 6 ch.
  - No. 4. Apr. pp. 91-122. 6 ch.
  - No. 5. May. pp. 123-152. 6 ch.
  - No. 6. June. pp. 153-178. 5 ch.
  - No. 7. July. pp. 179-204. 5 ch.
  - No. 8. Aug. pp. 205-240. 5 ch.
  - No. 9. Sept. pp. 241-267. 6 ch.
  - No. 10. Oct. 269-307. 6 ch.
  - No. 11. Nov. 309-342. 7 ch.

Classification no.

**A29. WEATHER BUREAU—Continued**

**A29.6: Monthly weather review—Continued**

- |    |   |
|----|---|
| 21 | V. 21. 1893. Washington, D. C., Weather Bureau. 1894—Continued<br>No. 12. Dec. 343-376. 7 ch.<br>No. 13. Annual Summary. pp. 377-390+vi. 7 ch.  |
| 22 | V. 22. 1894. Washington: Weather Bureau. 1895.<br>No. 1. Jan. pp. 1-45. 6 ch.<br>No. 2. Feb. pp. 47-97. 6 ch.<br>No. 3. Mar. pp. 99-147. 8 ch.<br>No. 4. Apr. pp. 149-191. 5 ch.<br>No. 5. May. pp. 193-234. 4 ch.<br>No. 6. June. pp. 235-272. 4 ch.<br>No. 7. July. pp. 273-310. 4 ch.<br>No. 8. Aug. pp. 311-350. 4 ch.<br>No. 9. Sept. pp. 351-392. 6 ch.<br>No. 10. Oct. pp. 393-439. 6 ch.<br>No. 11. Nov. pp. 441-485. 7 ch.<br>No. 12. Dec. pp. 487-533. 7 ch.<br>No. 13. Annual Summary. pp. 535-547+vii. 3 ch.        |
| 23 | V. 23. 1895. Washington: Weather Bureau. 1896.<br>No. 1. Jan. pp. 1-45. 32 ch.<br>No. 2. Feb. pp. 47-80. 7 ch.<br>No. 3. Mar. pp. 81-116. 9 ch.<br>No. 4. Apr. pp. 117-155. 6 ch.<br>No. 5. May. pp. 157-197. 8 ch.<br>No. 6. June. pp. 199-239. 5 ch.<br>No. 7. July. pp. 241-282. 6 ch.<br>No. 8. Aug. pp. 283-324. 5 ch.<br>No. 9. Sept. pp. 325-364. 6 ch.<br>No. 10. Oct. pp. 365-407. 6 ch.<br>No. 11. Nov. pp. 409-448. 8 ch.<br>No. 12. Dec. pp. 449-487. 1 pl. 7 ch.<br>No. 13. Annual Summary. pp. 489-501+vii. 5 ch. |
| 24 | V. 24. 1896. Washington: Weather Bureau. 1897.<br>No. 1. Jan. pp. 1-38. 7 ch.<br>No. 2. Feb. pp. 39-68. 7 ch.<br>No. 3. Mar. pp. 69-103. 9 ch.<br>No. 4. Apr. pp. 105-144. 9 ch.<br>No. 5. May. pp. 145-190. 12 ch.<br>No. 6. June. pp. 191-228. 6 ch.<br>No. 7. July. pp. 229-280. 8 ch.<br>No. 8. Aug. pp. 281-314. 4 ch.<br>No. 9. Sept. pp. 315-358. 6 ch.<br>No. 10. Oct. pp. 359-395. 5 ch.<br>No. 11. Nov. pp. 397-442. 9 ch.<br>No. 12. Dec. pp. 443-485. 6 ch.<br>No. 13. Annual Summary. pp. 487-496+vi. 5 ch.        |
| 25 | V. 25. 1897. Washington: Weather Bureau. 1898.<br>No. 1. Jan. pp. 1-42. 7 ch.<br>No. 2. Feb. pp. 43-84. 7 ch.<br>No. 3. Mar. pp. 85-121. 6 ch.<br>No. 4. Apr. pp. 123-188. 6 ch.<br>No. 5. May. pp. 189-234. 5 ch.<br>No. 6. June. pp. 235-283. 5 ch.<br>No. 7. July. pp. 285-338. 5 ch.<br>No. 8. Aug. pp. 339-379. 6 ch.<br>No. 9. Sept. pp. 381-424. 8 ch.<br>No. 10. Oct. pp. 425-470. 6 ch.<br>No. 11. Nov. pp. 471-516+[1]. 9 ch.<br>No. 12. Dec. pp. 519-568. 7 ch.<br>No. 13. Annual Summary. pp. 569-579+7. 5 ch.      |
| 26 | V. 26. 1898. Washington: Weather Bureau. 1899.<br>No. 1. Jan. pp. 1-43. 13 ch.<br>No. 2. Feb. pp. 45-89. 10 ch.<br>No. 3. Mar. pp. 91-137. 13 ch.   |

# Tables

Classifica-  
tion no.

## A29. WEATHER BUREAU—Continued

### A29.6: Monthly weather review—Continued

- |    |   |
|----|---|
| 26 | <p>V. 26. 1898. Washington: Weather Bureau. 1899—Continued</p> <p>No. 4. Apr. pp. 139-193. 8 ch.</p> <p>No. 5. May. pp. 195-240. 12 ch.</p> <p>No. 6. June. pp. 241-290. 7 ch.</p> <p>No. 7. July. pp. 291-341. 12 ch.</p> <p>No. 8. Aug. pp. 343-390. 7 ch.</p> <p>No. 9. Sept. pp. 391-437. 17 ch.</p> <p>No. 10. Oct. pp. 439-492. 11 ch.</p> <p>No. 11. Nov. pp. 493-525. 12 ch.</p> <p>No. 12. Dec. pp. 527-591. 12 ch.</p> <p>No. 13. Annual Summary. pp. 593-605+x. 5 ch.</p>  |
| 27 | <p>V. 27. 1899. Washington: Weather Bureau. 1900.</p> <p>No. 1. Jan. pp. 1-40. 9 ch.</p> <p>No. 2. Feb. pp. 41-87. 6 pl. 13 ch.</p> <p>No. 3. Mar. pp. 89-138. 13 ch.</p> <p>No. 4. Apr. pp. 139-186. 11 ch.</p> <p>No. 5. May. pp. 187-241. 6 pl. 8 ch.</p> <p>No. 6. June. pp. 243-285. 9 ch.</p> <p>No. 7. July. pp. 287-341. 3 pl. 8 ch.</p> <p>No. 8. Aug. pp. 343-393. 2 pl. 12 ch.</p> <p>No. 9. Sept. pp. 395-448. 11 ch.</p> <p>No. 10. Oct. pp. 449-502. 1 pl. 9 ch.</p> <p>No. 11. Nov. pp. 503-533. 9 ch.</p> <p>No. 12. Dec. pp. 535-575. 10 ch.</p> <p>No. 13. Annual Summary. pp. 577-597+ix. 5 ch.</p>                        |
| 28 | <p>V. 28. 1900. Washington: Weather Bureau. 1901.</p> <p>No. 1. Jan. pp. 1-49. 10 ch.</p> <p>No. 2. Feb. pp. 51-93. 1 pl. 11 ch.</p> <p>No. 3. Mar. pp. 95-139. 10 ch.</p> <p>No. 4. Apr. pp. 141-191. 9 ch.</p> <p>No. 5. May. pp. 193-238. 8 ch.</p> <p>No. 6. June. pp. 239-278. 8 ch.</p> <p>No. 7. July. pp. 279-320. 3 pl. 8 ch.</p> <p>No. 8. Aug. pp. 321-370. 8 ch.</p> <p>No. 9. Sept. pp. 371-424. 13 ch.</p> <p>No. 10. Oct. pp. 425-476. 10 ch.</p> <p>No. 11. Nov. pp. 477-525. 2 pl. 10 ch.</p> <p>No. 12. Dec. pp. 527-583. 1 pl. 10 ch.</p> <p>No. 13. Annual Summary. pp. 585-599+x. 7 ch.</p>                              |
| 29 | <p>V. 29. 1901. Washington: Weather Bureau. 1902.</p> <p>No. 1. Jan. pp. 1-47. 10 ch. 2 pl.</p> <p>No. 2. Feb. pp. 49-97. 13 ch. 5 pl.</p> <p>No. 3. Mar. pp. 99-143. 9 ch. 1 pl.</p> <p>No. 4. Apr. pp. 145-199. 9 ch.</p> <p>No. 5. May. pp. 201-241. 10 ch. 4 pl.</p> <p>No. 6. June. pp. 243-289. 4 pl.</p> <p>No. 7. July. pp. 291-339. 1 l. 9 ch. 1 pl.</p> <p>No. 8. Aug. pp. 341-397. 8 ch. 3 pl.</p> <p>No. 9. Sept. pp. 399-445. 10 ch.</p> <p>No. 10. Oct. pp. 447-487. 9 ch. 1 pl.</p> <p>No. 11. Nov. pp. 489-533. 13 ch.</p> <p>No. 12. Dec. pp. 535-589. 10 ch.</p> <p>No. 13. Annual Summary, 1901. pp. 591-613+ix. 7 ch.</p> |
| 30 | <p>V. 30. 1902.</p> <p>No. 1. Jan. pp. 1-59. 10 ch.</p> <p>No. 2. Feb. pp. 61-108. 10 ch.</p> <p>No. 3. Mar. pp. 109-156. 9 ch.</p> <p>No. 4. Apr. pp. 157-243. 12 ch.</p> <p>No. 5. May. pp. 245-292. 8 ch. 1 pl.</p> <p>No. 6. June. pp. 293-340. 8 ch.</p> <p>No. 7. July. pp. 341-392. 8 ch.</p> <p>No. 8. Aug. pp. 393-432. 8 ch.</p> <p>No. 9. Sept. pp. 433-472. 8 ch.</p> <p>No. 10. Oct. pp. 473-510. 8 ch.</p>  |

Classifica-  
tion no.**A29. WEATHER BUREAU—Continued****A29.6<sup>a</sup>: Monthly weather review (separates)**

[Some of the more important articles in the Review were issued separately in pamphlet form.]

**A29.7: Climate and crop bulletin (broadside)**

[The Climate and Crop Bulletin is issued weekly from April to September during the season of planting, cultivating, and harvesting of crops, and monthly from October to March. The title "Climate and Crop Bulletin" was adopted February, 1896, the bulletin having been previously issued under the title "Weather-Crop Bulletin." This publication deals with the general weather and crop conditions of the United States, while bulletins showing more detailed information for the several States are issued from the central stations of 43 climate and crop centers. A Climate and Crop Bulletin of the cotton region, dealing more particularly with the weather conditions affecting the cotton crop, is published weekly at New Orleans from about May 1 to the latter part of October. Cotton Region Bulletins containing temperature and rainfall observations reported by telegraph from about 150 stations in the Southern States are issued daily from 12 district centers in the cotton belt from April 16 to October 31. Corn and Wheat Region Bulletins, identical in character with the preceding, are issued daily from 9 district centers in the corn and wheat belt from April 1 to September 30. Fruit and Wheat Bulletins, also identical, are issued from San Francisco during June, July, and August.]

**Weather-crop bulletin.**

[Nos. 1-21 issued by Signal Office, U. S. A.]

- 891 1891. Nos. 22-39.
- 892 1892. Nos. 1-33.
- 893 1893. Nos. 1-32.
- 894 1894. Nos. 1-32.
- 895 1895. Nos. 1-32.
- 896<sup>1</sup> 1896. No. 1.

**Climate and crop bulletin.**

- 896<sup>2</sup> 1896. Nos. 2-32.
- 897 1897. Nos. 1-32.
- 898 1898. Nos. 1-31.
- 899 1899. Nos. 1-31.
- 900 1900. Nos. 1-32.
- 901 1901. Nos. 1-32.
- 902 1902. Nos. 1-30.

**A29.8: Climate and Health**

[Contains reports of "systematic investigation to ascertain the relationships and applicability of climatic and weather conditions to sanitary science." Issued monthly, July, 1895, to March, 1896, and then discontinued.]

1895. V. 1, nos. 1-6. July-Dec. 1895.

- No. 1. July. pp. 1-25. 20 ch.
- No. 2. Aug. pp. 27-58. 25 ch.
- No. 3. Sept. pp. 59-82. 20 ch.
- No. 4. Oct. pp. 83-107. 20 ch.
- No. 5. Nov. pp. 109-145. 24 ch.
- No. 6. Dec. pp. 147-174. 12 ch.

- 2 1896. v. 2, nos. 1-3. Jan.-Mar. 1896.
- No. 1. Jan. 1-35. 14 ch.
- No. 2. Feb. 37-64. 12 ch.
- No. 3. Mar. 65-92. 12 ch. 1 diagram.

[Discontinued Mar. 28, 1896.]

**A29.9: Cold wave bulletin (broadside)**

- 1 No. 1. Cold wave of Jan. 2-5, 1896. Jan. 8, 1896. (Chart.)

**A29.10: Daily river stages**

Pts. 1-3. Issued by Signal Office, War Department.

- 4<sup>1</sup> Pt. 4. Principal rivers of U. S., 1890-92; by Thomas Russell. lxxvii. 4°
- 4<sup>2</sup> Same, with gauge readings. lxxvii+439 pp. 10 charts. 4°
- 5<sup>1</sup> Pt. 5. Principal rivers of U. S., 1893-95; by Park Morrill. lxxii pp. 4°
- 5<sup>2</sup> Same, with gauge readings. lxxii+555 pp. 4°
- 6 Pt. 6. Principal rivers of U. S., 1896-99; by H. C. Frankenfield. 1900. 446 pp. 4°

## Tables

Classifica-  
tion no.

## A29. WEATHER BUREAU—Continued

### A29.11: Instrument Room (or Division) circulars

- A<sup>1</sup> A. Instructions for obtaining and transcribing records from recording instruments. Washington, Weather Bureau. 1892. 12 pp.
- A<sup>2</sup> Same, rev. ed.; by C. F. Marvin. 1894. 40 pp.
- A<sup>3</sup> A. Instructions for obtaining and tabulating records from recording instruments; by C. F. Marvin. 1898. 31 pp.
- B<sup>1</sup> B. Directions for use of maximum and minimum thermometers. Washington, Weather Bureau. 1892. 11 pp.
- B<sup>2</sup> B. Instructions for use of maximum and minimum thermometers, rev. ed. 1895. 16 pp.
- C<sup>1</sup> C. Instructions for use of rain-gauge. Washington, Weather Bureau, 1892. 8 pp.
- C<sup>2</sup> Same, rev. ed. 1895. 11 pp.
- D<sup>1</sup> D. Anemometry, a circular of general information respecting theory and operation of typical instruments for indicating, measuring, and automatically recording wind movement and direction, etc.; prepared by C. F. Marvin. Washington, Weather Bureau. 1893. 40 pp.
- D<sup>2</sup> Same. 1900. 67 pp. 1 pl.
- E<sup>1</sup> E. Instructions for using Marvin's weighing rain and snow gauge [by C. F. Marvin]. 1893. 16 pp.
- E<sup>2</sup> E. Measurement of precipitation; by C. F. Marvin. 1899. 28 pp.
- F<sup>1</sup> F. Barometers and measurement of atmospheric pressure; by C. F. Marvin. 1894. 74 pp.
- F<sup>2</sup> Same, 2d edition. 1901. 94 pp.
- G<sup>1</sup> G. Instructions for use of combined maximum and minimum soil thermometers; by C. F. Marvin and Milton Whitney. 1894. 8 pp.
- G<sup>2</sup> G. Instructions for care and management of sunshine recorders; by C. F. Marvin. 1896. 18 pp.
- G<sup>3</sup> Same, 2d ed. 1901. 19 pp.
- H H. Instructions for use of maximum and minimum radiation thermometers; by C. F. Marvin and Milton Whitney. 1894. 10 pp.
- [No circulars I or J will be issued.]
- K K. Instructions for aerial observers; by C. F. Marvin. 1898. 33 pp. 3 pl.

### A29.12: Instructions (unnumbered)

- An3 Aneroid barograph. Instructions for use of aneroid barograph on Great Lakes. Washington, Weather Bureau. 1897. 7 pp.
- C81 Corn. Instructions governing corn, wheat, cotton, sugar, and rice region service; by James Berry. Washington, Weather Bureau. 1897. 9 pp. 1 table.
- C82<sup>1</sup> Cotton region. Instructions to observers and code for enciphering reports at cotton region and sugar and rice stations of Weather Bureau. Washington, D. C., Weather Bureau. 1892. 27 pp.
- C82<sup>2</sup> Same. 1895. 39 pp.
- D63<sup>1</sup> Displaymen. Instructions to special displaymen. Washington, D. C., Weather Bureau. 1892. 13 pp. 12°.
- D63<sup>2</sup> Displaymen. Instructions to wind-signal displaymen. Washington, Weather Bureau. 1896. 11 pp. 1 pl.
- Ob7 Observers. Instructions for observers. 1895. 82 pp.
- R13 Rainfall observers. Instructions to special rainfall observers. Washington, D. C., Weather Bureau. 1893. 22 pp.
- R52<sup>1</sup> River observers. Instructions for special river observers; by Thomas Russell. Washington, D. C., Weather Bureau. 1892. 54 pp.
- R52<sup>2</sup> River observers. Instructions for special river observers. 1894. 49 pp.
- R52<sup>3</sup> River observers. Instructions to special river and rainfall observers. 1902. 48 pp.
- Se1<sup>1</sup> Seacoast telegraph lines. Instructions to operators on United States seacoast telegraph lines; by E. L. Bugbee. 1892. 24 pp.
- Se1<sup>2</sup> Seacoast telegraph lines. Instructions to operators on seacoast telegraph lines; by J. H. Robinson. Washington, Weather Bureau. 1897. 26 pp. 1 pl.
- Su7 Sunshine recorder. Instructions for using glass electrical sunshine recorder, pattern, 1893. n. t. p. [1893.] 4 pp.

Classification  
no.**A29. WEATHER BUREAU—Continued****A29.12: Instructions (unnumbered)—Continued**

- V88<sup>1</sup> Voluntary observers. Instructions for voluntary observers; by T. Russell. 1892. 100 pp.
- V88<sup>2</sup> Voluntary observers. Instructions for voluntary observers. Washington, Weather Bureau. 1897. 22 pp. 1 pl.
- V88<sup>3</sup> Same, Washington, Weather Bureau. 1899. 23 pp. 1 pl.
- V88<sup>4</sup> Same, 2d edition, comprising circulars B and C, instrument room. 1901. 28 pp. 1 pl.

**A29.13: Meteorological chart of the Great Lakes (20 x 25 in.)**

- 897 1897. Oct.-Dec.
- 898 1898. Apr.-Dec. and Summary for year.
- 899 1899. May-Dec.; Summary for 1899; V. 2, no. 9; by A. J. Henry and N. B. Conger. 1899. 28 pp. 12 charts. 4°
- 900 1900. May-Dec. Nos. 1-8; Summary for season; by A. J. Henry and N. B. Conger. V. 3, no. 9 [erroneously printed 10]. 23 pp. 14 ch. 4°
- 901<sup>1</sup> 1901. No. 1. [No monthly date, received June 21, 1901.] 28 pp. 4 ch. 4°
- 901<sup>2</sup> No. 2. Summary for season [no monthly date, received Jan. 30, 1902]. 32 pp. 8 ch. 4°
- 902 1902. No. 1. 26 pp. 1 pl. 4°

**A29.14: River and flood service**

Monthly report (reprinted from Monthly Weather Review).

- 897 1897. Sept., 11 pp. 1 pl.  
Oct., 11 pp. 1 pl.  
Nov., 13 pp. 1 pl.  
Dec., 13 pp. 1 pl.
- 898 1898. Jan., 18 pp. 1 pl.  
Feb., 14 pp. 1 pl.  
Mar., 19 pp. 1 pl.  
Apr., 30 pp. 1 pl.  
May, 14 pp. 1 pl.  
June, 14 pp. 1 pl.  
July, 13 pp. 1 pl.  
Aug., 15 pp. 1 pl.  
Sept., 15 pp. 1 pl.  
Oct., 16 pp. 1 pl.  
[Discontinued.]

**A29.15: Sanitary climatology circulars**

- 1 No. 1. [Asking cooperation of physicians, boards of health, etc.] Jan. 2, 1895. (Circ.)
- 2 No. 2. [To officials of United States weather bureaus on methods of keeping statistics, etc.] Jan. 2, 1895. (Circ.)
- 3 No. 3. [To publishers of periodicals, newspapers, etc.] Jan. 2, 1895. (Circ.)
- 4 No. 4. Information relative to investigation of influence of climate on health. [1895.] 7 pp.  
[Series discontinued.]

**A29.16: Snow and ice bulletin**

[Issue begun Feb., 1892. Issued in weekly numbers from early in December to latter part of March. First title, "Depth of Snow on Ground," used to Mar. 30, 1896; changed to "Snow and Ice Chart," and continued under that name until Feb. 21, 1899, when the present title was substituted. Shows area covered by snow, its depth, and the thickness of ice in rivers and harbors.]

**A29.17: Storm bulletin**

- LAKE STORM BULLETIN.
- 893 1893, nos. 1-5.
- 894<sup>1</sup> 1894, no. 1.
- STORM BULLETIN.
- 894<sup>2</sup> 1894, nos. 2, 3.
- 895 1895, nos. 1-3.
- 896 1896, nos. 1-5.
- 897 1897 (none issued).

**Tables**Classifica-  
tion no.**A29. WEATHER BUREAU—Continued****A29.17: Storm bulletin—Continued****Storm bulletin—Continued**

898	1898, no. 1.
899	1899, no. 1.
900	1900, no. 1.

**A29.18: Weather map (broadside)**

[This publication, issued at the Weather Bureau in Washington, is the only Government publication issued every day in the year, Sundays and holidays included. At 94 stations of the Weather Bureau smaller weather maps are issued daily, except Sundays and holidays. At 18 of the less important stations bulletins, containing practically the same meteorological data that appear on the weather maps, are issued.]

To an extent permitted by the editions, the maps and bulletins are furnished free of charge to business and commercial exchanges, corporations, firms, individuals, and educational institutions that will display them for the benefit of the public or use them for educational purposes.]

[Issued by Signal Office, tri-daily from Jan. 1, 1871, 7:35 a. m., to June 30, 1888; semi-daily, July 1, 1888, to June 30, 1891.]

**Semi-daily.**

891	1891, July 1-Dec. 31.
892	1892, Jan. 1-Dec. 31.
893	1893, Jan. 1-Dec. 31.
894	1894, Jan. 1-Dec. 31.
895 <sup>1</sup>	1895, Jan. 1-Sept. 30.

**Daily.**

895 <sup>2</sup>	1895, Oct. 1-Dec. 31.
896	1896, Jan. 1-Dec. 31.
897	1897, Jan. 1-Dec. 31.
898	1898, Jan. 1-Dec. 31.
899	1899, Jan. 1-Dec. 31.
900	1900, Jan. 1-Dec. 31.
901	1901, Jan. 1-Dec. 31.
902	1902, Jan. 1-Dec. 31.

**A29.19: Special river bulletins (circulars) 4°**

897	1897. Mar. 15-19, 28-31; Apr. 1-29.
-----	-------------------------------------



## INDEX TO THE TABLES

When the consalter finds in this index an entry which interests him, let him note the reference figures or "classification number" opposite such entry, then turn to the same figures in the "Tables" which form the first part of this work. These will easily be found, because they are arranged in numerical order from 1 to the end. Having turned in the Tables to the figures of the index entry, there will be found a complete statement of the number, series, bureau, etc., by which the publication indexed is known, and also its exact title and history.

For a full explanation of the "classification numbers" used as reference figures in this index, see pp. 8-15, without a careful perusal of which the best results can not be obtained in using this index.



	<b>Index</b>
	<b>Classification no.</b>
Abattoirs. <i>See</i> Cattle markets and abattoirs.	
Abbe, Cleveland:	
Anchor ice, note on. 1897. p. 212.....	A29.6:25
Aqueous vapor, total quantity of, in atmosphere. 1894. p. 539 ..	A29.6:22
Atmospheric refractions at surface of water. 1896. p. 371.....	A29.6:24
Marine nephoscope and its usefulness to navigator. 1894. p. 161..	A29.3:11 <sup>1</sup>
Meteorological notes, monthly, Aug., 1893, to Oct., 1902. [The "Notes" are entered under individual titles in index].....	A29.6:
Metereological work of U. S. Signal Service, 1870 to 1891. 1895. p. 232.....	A29.3:11 <sup>2</sup>
Munich, International Conference of Meteorologists, Aug., 1891. p. 626.....	A1.1:891
same, p. 626 .....	A29.1:891 <sup>2</sup>
Precipitation, true amount of, determination of, and its bearing on theories of forest influence. 1893. p. 175.....	A13.3:7
Rainfall, charting of, note on. 1902. p. 214.....	A29.6:30
Weather Bureau signals. 1892. p. 35 .....	A29.3:7
Weather determining instruments, corrections, methods of reduc- tion, resulting accuracy. p. 37 .....	A29.1:891 <sup>3</sup>
Weather forecasts, long-range, physical basis of. 1901. p. 551 ..	A29.6:29
<i>See also</i> , as joint author, De Riemer, Alicia — Richards, George W.; as translator, Bergholz, Paul.	
Abbot, Charles G. Sun-spot cycle, relation of, to meteorology. 1902. p. 178 .....	A29.6:30
Abbot, Henry Larcom:	
Chagres River—	
discharges of, ratio of, to rainfall. 1900. p. 541.....	A29.6:27
upper, rainfall and drainage in. 1900. p. 243.....	A29.6:28
Climatology of Isthmus of Panama, including temperature, winds, barometric pressure, and precipitation, 1899. pp. 198, 302 ...	A29.6:27
Heat, our killing. 1901. p. 371.....	A29.6:29
Meteorology of Panama—	
contributions to. 1899. p. 7.....	A29.6:28
report of. 1899. p. 463 .....	A29.6:27
Abbott, James W. Roads, mountain. p. 183.....	A1.10:900
Same, p. 527.....	A1.10:901
Abbott, L. S.:	
Cattle, feeding of, aids to. p. 211.....	A1.1:866
Potato culture in Lake County, Ohio. p. 295.....	A1.1:865
Abbreviations used in Experiment Station Record .....	A10.2:Ab2
Abel, (Mrs.) Mary Hinman:	
Beans, peas, and other legumes as food. 1900 .....	A1.9:121
Sugar as food. 1899 .....	A1.9:93
Abercrombie, John W. Common schools as affected by roads. 1902. p. 39 .....	A22.3:23
Abercrombie, W. R. Copper River country, Alaska, notes on. p. 307 .....	A10.1 <sup>2</sup> :901
Abilene, Texas. Forage crops and range improvement at, progress of experiments (Bentley). 1899.....	A3.4:23
Abortion. <i>See</i> Cows — Mares.	
Abutilon avicennæ, cultivation of, in New Jersey (Waterhouse). p. 606.....	A1.1:879
Acapulco, Mexico:	
Grasses collected by Dr. E. Palmer in vicinity of (Scribner). 1897. p. 7 .....	A3.3:4
Roseanthus, a new genus of cucurbitaceæ from (Cogniaux). 1896. p. 577 .....	A6.5:3
Accessions to Agriculture Department library.....	A17.3:
Accounts and Disbursements Division, Agriculture Department.....	A2.
Acetylene gas, substitution of, for oil in storm-warning lanterns (Richardson). 1902. p. 154.....	A29.3:31
Acid and alkali solutions, standardization of:	
1892 (Parsons). p. 80.....	A7.3:35
1893 (Jenter). p. 43 .....	A7.3:38
1894 (Miller). p. 145 .....	A7.3:43
Acid media. <i>See</i> Media.	
Acid soils. <i>See</i> Soils.	

# Index

	Classification no.
Acorn insects, primary and secondary (Murtfeldt). 1894. p. 318 ..	A9.7:6
Actinomycosis. <i>See</i> Lumpy-jaw.	
Acworth, A. E. Old records of cold weather in March in Maryland, 1823-94. p. 126 .....	A29.6:22
Adams, F. G.:	
Agriculture in common schools. 1885. p. 174 .....	A1:7:9
Sorghum culture in Kansas, history of. 1884. p. 71 .....	A7:3:3
Adams (Mrs.) L. B. Home life, training, and ambitions of farmers' boys. p. 307 .....	A1.1:863
Addams, Jane. <i>See</i> Atwater, Wilbur Olin, and Bryant, Arthur Peyton.	
Adirondacks, practical forestry in (Graves). 1899 .....	A13.3:26
Adulterated butter. <i>See</i> Renovated butter.	
Aegeriidæ. <i>See</i> Moths.	
Aerial observations, 1899 (Wurtz). p. 114 .....	A29.3:24
same (Noyes). p. 117 .....	A29.3:24
same (Piercy). p. 119 .....	A29.3:24
Aërial observers, instructions for (Marvin). 1898 .....	A29.11:K
Aërial voyages by balloons and kites, notes on (Rotch). 1900. p. 553. <i>See also</i> Balloons.	A29.6:28
Aërolite, fall of, in Arizona (Abbe). 1897. p. 56 .....	A29.6:25
Aëronautical Conference, International, at Strassburg, Germany, 1898, report on (Rotch). p. 158 .....	A29.6:26
Aëronautical Congress, International, at Berlin, 1902 (Rotch). p. 356.	A29.6:30
Aëronautics, international committee on, personnel of (Abbe). 1896. p. 462 .....	A29.6:24
Aëro-physical observatory, equipment of (McAdie). 1896. p. 453.	A29.6:24
Africa, South:	
Animal products in (Stowe). p. 512 .....	A4.1:898
Frost work in, notes on (Abbe). 1900. p. 14 .....	A29.6:28
Meat in (Stowe). p. 512 .....	A4.1:900
Meteorology, notes on (Abbe). 1900. p. 13 .....	A29.6:28
<i>See also</i> Cape Colony.	
Agamodistomum ophthalmobium. <i>See</i> Fluke-worms.	
Agarics, North American, report on (Macadam). 1889. p. 58, 135..	A28.5:5
<i>See also</i> Mushrooms.	
Agaricus campestris and other basidiomycetous fungi, spores of, preliminary study of germination of (Ferguson). 1902 .....	A19.3:16
Agaves:	
Fiber-producing (Dodge). 1893. p. 34 .....	A11.5:5
Geographic and vertical distribution of, in deserts and desert ranges of southern California, southern Nevada, northwestern Arizona, and southwestern Utah (Merriam). 1893. p. 345..	A5.5:7
Age, determination of, by teeth in domestic animals. 1898. p. 667.	A1.10:898
Agonoderus palpepes injurious to corn, note on. 1886. p. 44 .....	A9.3:12
Agricultural Academy. <i>See</i> Poppelsdorf, Prussia.	
Agricultural and climatic features of arid regions of Pacific slope, etc. (Hilgard and others). 1882 .....	A1.8:20
Agricultural and horticultural periodicals, list of:	
1867. p. 404 .....	A1.1:867
1868. p. 608 .....	A1.1:868
1870. p. 544 .....	A1.1:870
Agricultural and horticultural societies and clubs, complete list. p. 364 .....	A1.1:867
Same. 1869 .....	A1.2:801
Agricultural and mechanical college of Alabama. <i>See</i> Atwater, Wilbur Olin, and Woods, Chas. Dayton.	
Agricultural and mechanical colleges:	
Relation of—	
to Department of Interior, 1893 (Holcombe). p. 114 .....	A10.3:16
to State (Drake). 1901. p. 183 .....	A10.3:99
Agricultural associations and farmers' institutes, relations between (Dye). 1902. p. 44 .....	A10.3:110
Agricultural associations in Belgium (De Vuyst). 1898. p. 3 .....	A10.6:9
Agricultural books, recent, review of:	
1868. p. 555 .....	A1.1:868
1869. p. 487 .....	A1.1:869
1871. p. 410 .....	A1.1:871

**Index**  
Classification no.

Agricultural botany. <i>See</i> Botany.	
Agricultural census of Austria. 1865. No. 6. p. 18 .....	A27.9:3
Same, Belgium. 1885. No. 24. p. 37.....	A27.9:23
Agricultural chemical analysis, apparatus used in, some new forms of, explanation of (Wiley). 1890. p. 96.....	A7.3:28
Agricultural chemistry:	
Estimation and importance to, of ash constituents of plants (Tol- lens). 1902. pp. 207, 305 .....	A10.6:13
Facts in. 1867. p. 92 .....	A27.9:5
Progress in, 1899. p. 742.....	A1.10:899
<i>See also</i> Chemical analysis—Chemistry—Chemists, Official Agri- cultural, Association of—Fertilizers—Manures—Soils.	
Agricultural Chemists, Official, Association of. <i>See</i> Chemists, Official Agricultural, Association of.	
Agricultural climatology station at Juvisy, physical and meteorolog- ical researches at, principally on solar rays (Flammarion). 1899. pp. 103, 203.....	A10.6:10
Agricultural college, what [it] ought to be, paper on (Maurice). 1885. p. 108 .....	A1.7:9
Agricultural colleges (land-grant colleges):	
Agricultural departments of, requirements for admission to, and cost of attendance. 1900. p. 674 .....	A1.10:900
American, some types of (True). 1898. p. 63.....	A1.10:898
Attitude of, toward university extension (Voorhees). 1895. p. 49.	A10.3:24
Collective exhibit of, at World's Columbian Exposition, 1893 (Alvord). p. 103.....	A10.3:16
Education at, general drift of (Patterson). 1901. p. 99.....	A10.3:99
Forest experiment stations in connection with (Egleston). 1885. p. 153 .....	A1.7:9
Historical sketch of (French). p. 137.....	A1.1:865
How may university extension work be best conducted by? (Rob- erts). 1898. p. 55 .....	A10.3:49
Libraries of (Clark). 1902. p. 25.....	A10.3:115
Limits of education under the law at (Knapp). 1885. p. 163...	A1.7:9
List of, 1872 .....	A1.8:5
same. 1876 .....	A1.8:12
Manual labor in (Emery). 1891. p. 106 .....	A10.3:7
Military instruction in, report of committee on (Atherton). 1901. p. 85 .....	A10.3:99
National defense and (Dabney). 1899. p. 64 .....	A10.3:65
same, n. d. ....	A10.4:40
Note on. 1866. p. 71 .....	A27.9:4
Preparatory teaching in (Hilgard). 1898. p. 61 .....	A10.3:49
Preparatory work in (Hays). 1898. p. 65.....	A10.3:49
Statistics of. 1899. p. 1001.....	A10.6:10
Vegetable physiology in (Stone). 1896. p. 99.....	A10.3:41
What can they do to nourish a hearty sentiment for rural life (Davenport). 1896. p. 82.....	A10.3:41
What mechanical work shall we give to students of our? (Drake.) 1895. p. 71.....	A10.3:24
What should be taught in? (Fairchild). 1896. p. 69 .....	A10.3:41
same (Goodell). p. 71.....	A10.3:41
same (Waters). p. 73 .....	A10.3:41
same (White). p. 75 .....	A10.3:41
Work of, some general considerations regarding (Ellis). 1899. p. 15.....	A10.3:65
<i>See also</i> Agricultural education—Cirencester, England—Down- ton, England—Illinois, University of—Kansas State Agri- cultural College—Poppelsdorf, Prussia—Purdue University School of Agriculture.	
Agricultural colleges and experiment stations:	
Address list of .....	A10.4:26
Relation to farmers' institutes (Hutchinson). 1902. p. 33.....	A10.3:110
Road making at, letter relative to cooperation of road-inquiry office in aid of (Stone) .....	A22.2:Ag8
Statistics of. 1894 .....	A10.4:27

# Index

	Classification no.
<b>Agricultural colleges and experiment stations—Continued</b>	
Statistics of—	
1896 .....	A10.4:35
1897 (Sommers) .....	A10.3:51
1898 (Sommers) .....	A10.3:64
1899 (Davis) .....	A10.3:78
1899, report on. p. 1002 .....	A10.6:10
1900 (Spethmann) .....	A10.3:97
1901 (Spethmann) .....	A10.3:114
<b>Agricultural Colleges and Experiment Stations, American, Association of:</b>	
[1st annual] convention, July 8, 9, 1885, proceedings of .....	A1.7:9
2d annual convention, Jan., 1889, circular urging attendance at ...	A10.4:13
same, proceedings of; edited by A. W. Harris and H. E. Alvord. 1889 .....	A10.5:1
3d annual convention, Nov., 1889, proceedings of; edited by A. W. Harris and H. E. Alvord .....	A10.5:2
4th annual convention, 1890, proceedings of; edited by A. W. Harris and H. E. Alvord .....	A10.5:3
5th annual convention, 1891, proceedings of; edited by A. W. Harris and H. E. Alvord .....	A10.3:7
same, delegates and visitors registered .....	A10.4:21
6th annual convention, 1892, proceedings of; edited by A. W. Harris and H. E. Alvord .....	A10.3:16
same, report on. p. 397 .....	A10.6:4
7th annual convention, 1893, proceedings of; edited by A. C. True and H. E. Alvord .....	A10.3:20
same, report on. p. 272 .....	A10.6:5
8th annual convention, 1894, proceedings of; edited by A. C. True and H. H. Goodell .....	A10.3:24
same, report on. p. 257 .....	A10.6:6
9th annual convention, 1895, proceedings of; edited by A. C. True and H. H. Goodell .....	A10.3:30
same, report on. p. 169 .....	A10.6:7
10th annual convention, 1896, list of delegates and visitors to. 1896 .....	A1.2:Ag8 <sup>1</sup>
same, proceedings of; edited by A. C. True and H. H. Goodell. 1896 .....	A10.3:41
same, report on (Beal). p. 541 .....	A10.6:8
11th annual convention, 1897, proceedings of; edited by A. C. True and H. H. Goodell .....	A10.3:49
same, report on (Beal). p. 303 .....	A10.6:9
12th annual convention, 1898, proceedings of; edited by A. C. True, W. H. Beal, and H. H. Goodell .....	A10.3:65
same, report on (Beal). p. 704 .....	A10.6:10
13th annual convention, 1899, proceedings of; edited by A. C. True, W. H. Beal, and H. H. Goodell .....	A10.3:76
same, report on (Allen). p. 405 .....	A10.6:11
14th annual convention, 1900, proceedings of; edited by A. C. True, W. H. Beal, and H. H. Goodell .....	A10.3:99
same, report on (Allen). p. 404 .....	A10.6:12
15th annual convention, 1901, proceedings of; edited by A. C. True, W. H. Beal, and H. H. Goodell .....	A10.3:115
same, report on. p. 507 .....	A10.6:13
16th annual convention, 1902, report on (Crosby). p. 313 .....	A10.6:14
Constitution of. 1897 .....	A10.4:36
<b>Report of executive committee—</b>	
Jan., 1889. p. 23 .....	A10.5:1
Nov., 1889. p. 15 .....	A10.5:2
1890. p. 19 .....	A10.5:3
1892. p. 21 .....	A10.3:16
1893. p. 19 .....	A10.3:20
1894. p. 15 .....	A10.3:24
1895. p. 5 .....	A10.3:30
1896. p. 11 .....	A10.3:41
1897. p. 11 .....	A10.3:49
1898. p. 13 .....	A10.3:65
1899. p. 11 .....	A10.3:76

	<b>Index</b>
	<b>Classification no.</b>
Agricultural Colleges and Experiment Stations, etc.—Continued	
Report of executive committee—Continued	
1900. p. 11 .....	A10.3:99
1901. p. 19 .....	A10.3:115
See also Agricultural Congress, National—Agriculture and Chemistry Section—Agriculture Section—Agriculturists, conventions of, 1882 and 1883—Botany Section—Chemistry Section—College Work Section—Entomology Section—Horticulture and Botany Section—Horticulture Section—Mechanic Arts Section.	
Agricultural colleges and model farms, letter on (McChesney). 1868. p. 460 .....	A27.9:6
Agricultural colleges and other institutions in United States, having courses in agriculture:	
Directory of. 1885 .....	A.1.8:39
List of—	
1895. p. 557 .....	A1.10:895
1896. p. 603 .....	A1.10:896
1897. p. 622 .....	A1.10:897
1898. p. 597 .....	A1.10:898
1899. p. 671 .....	A1.10:899
1900. p. 637 .....	A1.10:900
1901. p. 615 .....	A1.10:901
Organization, list of, with courses of study and boards of instruction—	
1889. p. 24 .....	A10.3:1
1890. p. 37 .....	A10.3:5
June, 1892. p. 33 .....	A10.3:12
April, 1893. p. 32 .....	A10.3:13
Jan., 1894. p. 29 .....	A10.3:19
Jan., 1895. p. 27 .....	A10.3:23
Jan., 1896. p. 27 .....	A10.3:27
Feb., 1897. p. 25 .....	A10.3:39
Jan., 1898. p. 24 .....	A10.3:47
Jan., 1899. p. 7 .....	A10.3:59
Jan., 1900. p. 7 .....	A10.3:74
Jan., 1901. p. 9 .....	A10.3:88
Mar., 1902. p. 11 .....	A10.3:111
Agricultural Congress, National, proceedings of:	
[1st] annual meeting, Washington, D. C., Feb. 15-17, 1872. (Called convention) .....	A1.2:C76
same, report on. p. 59 .....	A27.9:10
3d annual meeting, Atlanta, Ga., May 13, 1874, report on. p. 258.	A27.9:12
5th annual meeting, Philadelphia, Pa., Sept. 12-14, 1876, report on. p. 402 .....	A27.9:14
Agricultural education:	
Address on (Hamilton). 1896. p. 48 .....	A10.3:41
Advances in (Hays). 1893. p. 132 .....	A10.3:16
Belgium (De Vuyst). 1893. p. 703 .....	A10.6:4
same (True). 1896. p. 361 .....	A1.10:896
Cooperation of Department of Agriculture in (Willits). p. 65...	A1.1:891
Europe (McChesney). p. 127 .....	A1.1:868
European institutions for, some features of (True). 1897. p. 7..	A10.4:32
Evolution of (Fairchild). 1898. p. 32 .....	A10.3:49
Farmers' Institute as factor in creating desire for (Hamilton). 1902. p. 68 .....	A10.3:120
Finland (Woll). 1898. pp. 605, 703 .....	A10.6:9
France (Smith). 1900. p. 115 .....	A1.10:900
General drift of, at land-grant colleges (Patterson). 1901. p. 99.	A10.3:99
Germany. 1876. p. 281 .....	A27.9:14
Great Britain. 1865. p. 8. No. 2 .....	A27.9:3
Industrial and, paper relative to (McWhirter). 1885. p. 105...	A1.7:9
Italy (Paparelli). 1893. p. 326 .....	A10.6:4
Japan (Tamari). 1885. p. 187 .....	A1.7:9
Limits of, under the law, at agricultural colleges (Knapp). 1885. p. 163 .....	A1.7:9



# Index

Classification no.

Agricultural education—Continued	
Necessity of (Smith). 1883. p. 22 .....	A1.7:2
same .....	A1.8:25
New Jersey (Cook). 1882. p. 7 .....	A1.8:22
North Carolina (Holmes). 1883. p. 84 .....	A1.7:2
Popular, for farmer in United States (True). 1897. p. 279 .....	A1.10:897
Practical and scientific (Liggett). 1900. p. 48 .....	A10.3:76
Scandinavian countries, notes on (Woll). 1897. p. 7 .....	A10.4:32
same. 1898. pp. 605, 703 .....	A10.6:9
United States (True). p. 157 .....	A1.10:899
<i>See also</i> Agricultural colleges—Industrial colleges.	
Agricultural engineer (Magruder). 1900. p. 103 .....	A10.3:76
Agricultural exhibition. <i>See</i> Hamburg.	
Agricultural experiment station as educator of farmer (Caldwell).	
1882. p. 20 .....	A1.8:22
Agricultural experiment stations:	
Abstracts of reports of. 1889-1902 .....	A10.6:
Address list of. 1893 .....	A10.4:24
Advertising in publications of (True). 1898. p. 41 .....	A10.3:49
Agricultural conditions in U. S. as related to (Smith). 1900.	
p. 19 .....	A10.3:80
Annual reports of U. S. stations for 1888, digest of .....	A10.3:2 <sup>1</sup>
Botanists at—	
functions of (Stone) 1901. p. 138 .....	A10.3:99
list of, with outline of work in botany. 1890 .....	A10.3:6
Bulletins of—	
present and prospective (Ingersoll). 1893. p. 138 .....	A10.3:16
what is mission of? (Goodell). 1895. p. 69 .....	A10.3:24
Collective exhibit at Paris exposition, 1900—	
catalogue of (Evans). 1900. p. 633 .....	A10.3:80
committee report on preparation and care of (Harris). 1898.	
p. 43 .....	A10.3:49
same (Armsby). 1899. p. 30 .....	A10.3:65
same (Armsby). 1900. p. 20 .....	A10.3:76
same (Armsby). 1901. p. 23 .....	A10.3:99
Coöperative exhibit at World's Columbian Exposition—	
committee report on (Armsby). 1892. p. 24 .....	A10.3:7
same (Armsby). 1893. p. 99 .....	A10.3:16
same (Armsby). 1894. p. 34 .....	A10.3:20
favoring plan for (Harris). 1891. p. 43 .....	A10.5:3
Coöperative experiments, call of meeting, Mar. 5, 1889, to discuss.	A10.4:5
Coöperative work between Agriculture Department and (Bryan).	
1901. p. 59 .....	A10.3:99
Coöperation with—	
farmer's organizations in experiment work (Jenkins). 1895.	
p. 50 .....	A10.3:24
Weather Bureau (Harris). 1893. p. 106 .....	A10.3:16
Dairy work at (Allen). 1897. p. 359 .....	A10.6:8
Entomological work in (Osborn). 1895. p. 85 .....	A10.3:24
Entomologists' work in (Cook). 1891. p. 212 .....	A9.7:3
Establishment and growth of, in U. S. (True). 1889. p. 73 ....	A10.3:1
Farmers' institute as promoter of closer intimacy between farm-	
ers and. 1902. p. 78 .....	A10.3:120
Food laboratories in connection with, suggestions for establishment	
of. 1893 .....	A10.3:17
Foreign—	
list of, Jan., 1899. p. 63 .....	A10.3:59
same, Jan., 1900. p. 64 .....	A10.3:74
same, Jan., 1901. p. 69 .....	A10.3:88
same, Mar., 1902. p. 85 .....	A10.3:11
work of, etc. (Angerer). 1872. p. 297 .....	A27.9:10
same (True and Crosby). 1902 .....	A10.3:112
Grass and forage-plant investigations in (Williams). 1901. p. 148.	A10.3:99
Growth and purpose in America, address on (Jordan). 1901. p. 42.	A10.3:99
Historical and statistical report of, in U. S. (True). 1899. p. 513.	A1.10:899
History and present status of, in U. S., report prepared for Paris	
Exposition, 1900 (True and Clark). 1900 .....	A10.3:80

**Agricultural experiment stations—Continued**

**Horticulturists of—**

list of, with outline of work in horticulture at the several stations (Alwood). 1889 .....	A10.3:4
meeting of, at Columbus, Ohio, June 13, 14, 1889 (Harris) ....	A10.3:3
same, report of secretary (Bishop). p. 9 .....	A10.3:3
some undefined duties and methods of (Rane). 1896. p. 76..	A10.3:30
How can they reach and interest the farmers? (Roberts). 1889. p. 30 .....	A10.5:1

Index to literature of. *See* Agricultural literature.

Inspection of agricultural materials by, in U. S. (Allen and others). 1900. p. 465 .....	A10.3:80
--	----------

Law governing, Agriculture Department's interpretation of various sections of. 1896 .....	A10.4:29
---	----------

Legislation regarding. 1889. p. 58 .....	A10.3:1
--	---------

**List of, giving location, names of directors, and principal lines of work—**

1894. p. 526 .....	A1.10:894
1895. p. 558 .....	A1.10:895
1896. p. 604 .....	A1.10:896
1897. p. 624 .....	A1.10:897
1898. p. 598 .....	A1.10:898
1899. p. 672 .....	A1.10:899
1900. p. 638 .....	A1.10:900
1901. p. 616 .....	A1.10:901

**List of, showing organization, with names of governing boards and station staff—**

1889 (preliminary list) .....	A10.4:1
1889. p. 28 .....	A10.3:1
1890. Mar., p. 7 .....	A10.3:5
1891. June .....	A10.4:20
1892. June, p. 11 .....	A10.3:12
1893. Apr., p. 9 .....	A10.3:13
1894. Jan., p. 9 .....	A10.3:19
1895. Jan., p. 7 .....	A10.3:23
1896. Jan., p. 7 .....	A10.3:27
1897. Feb., p. 5 .....	A10.3:39
1898. Jan., p. 5 .....	A10.3:47
1899. Jan., p. 42 .....	A10.3:59
1900. Jan., p. 43 .....	A10.3:74
1901. Jan., p. 47 .....	A10.3:88
1902. Mar., p. 11 (colleges also given in this list) .....	A10.3:111

Nomenclature used in publications of, recommendations regarding uniformity in. 1896. p. 65 .....	A10.3:41
same, 1899. p. 117 .....	A10.3:65

Officers of, how can we increase attendance of, at our annual conventions? (Thorne). 1894. p. 61 .....	A10.3:20
--	----------

Organization and methods (Myers). 1889. p. 99 .....	A10.5:1
---	---------

**Organization of, in U. S.—**

chronological table of. 1889. p. 20 .....	A10.3:1
history of (True) .....	A10.4:44
introduction to report (Colman). 1889. p. 5 .....	A10.3:1
report on. 1889 .....	A10.3:1

**Publications of—**

lacking in library of Experiment Stations Office, Agriculture Department, list of, Nov. 1, 1892 .....	A10.2:St2
list of, 1888-1899 (Harlow). 1900. p. 508 .....	A10.3:80
uniformity of (Harris). 1894. p. 30 .....	A10.3:20
Records of, report on (Morrow). 1891. p. 102 .....	A10.5:3
Reports of, memorandum for. 1889 .....	A10.4:4
Road-making at, letter relative to cooperation of Road Inquiry Office in aid of (Stone) .....	A22.2:Ag8
Station workers and revenues, in U. S. 1889. p. 22 .....	A10.3:1
Statistics, general, of, in U. S., 1899 (Davis). 1900. p. 501 .....	A10.3:80

*See also* Agricultural colleges and experiment stations.

# Index

	Classification no.
<b>Agricultural experiment stations—Continued</b>	
Their object and work (True). 1895.....	A10.3:26
Variety testing in, progress of (Rane). 1901. p. 141.....	A10.3:99
What and why of. 1889 .....	A1.9:1
What they have done in originating varieties of plants, by cross- ing, selecting, etc. 1901. p. 143.....	A10.3:99
Work and expenditure of, annual statement of, to Congress (True)—	
1897 .....	A10.3:50
1898 .....	A10.3:61
1899 .....	A10.3:83
1900 .....	A10.3:93
1901 .....	A10.1 <sup>2</sup> :901
<i>See also</i> Explanatory note under A10.1 <sup>2</sup> :	
Work of—	
committee report on, Oct., 1887.....	A1.8:45
handbook of. 1893.....	A10.3:15
in reform of vegetable nomenclature (Goff). 1890. p. 47....	A10.5:3
on tobacco (Schulte). 1900 .....	A1.8:63
permanent elements in (True).....	A10.4:30
same, with additional remarks. 1896. p. 42.....	A10.3:30
short reports on various subjects. 1890 .....	A1.9:2
<i>See also</i> Experiment station work.	
<i>See also</i> Agricultural colleges and experiment stations—Alaska— Belgium—Bernburg Agricultural Experiment Station—Con- necticut—Darmstadt—Europe—Experiment Stations Of- fice—German Agricultural Experiment Station—Ghent— Grignon Agricultural Experiment Station—Halle—Hawaii— Holland—Hungary—Italy—New York State Experiment Station—Philippines—Porto Rico—Rothamsted Experi- mental Station—Switzerland—Veterinarians—Wyoming- Experiment Station.	
<b>Agricultural experiment work:</b>	
Cooperation of agricultural experiment stations with farmers' organizations in (Jenkins). 1895. p. 50.....	A10.3:24
Establishment of official methods of (Gulley). 1893. p. 147....	A10.3:16
Relation of teaching to (Morrow). 1891. p. 67.....	A10.3:7
<i>See also</i> Agricultural experiment stations, and references there- under—Field experimentation—Plat experimenting.	
<b>Agricultural exports:</b>	
Average prices for. 1901. p. 806.....	A1.10:901
Distribution of, of U. S. (Hitchcock)—	
1892-1896 .....	A12.4:13
1894-98 .....	A12.3:16
1895-99 .....	A12.3:20
1896-1900 .....	A12.3:25
1897-1901 .....	A12.3:29
Reciprocity and. 1892. p. 391.....	A27.9:30
Tables of—	
1826-62. p. 599 .....	A1.1:862
1862-65. p. 302 .....	A27.9:4
1868. p. 238 .....	A27.9:7
1893. p. 490 .....	A27.9:31
Agricultural exports and imports, reports on, 1893 to 1899.....	A12.4:
Agricultural expositions, results of, in Prussia. 1871. p. 456.....	A27.9:10
Agricultural fairs, list of. 1871. p. 353.....	A27.9:9
Agricultural grasses and forage plants of U. S., and such foreign kinds as have been introduced (Vasey) .....	A1.8:32
Agricultural hydraulics (Charpentier de Cossigny). 1891. pt. 1. p. 349 .....	A15.2:Ir7 <sup>2</sup>
<b>Agricultural implements:</b>	
Ancient and modern machines and. p. 392 .....	A1.1:870
Descriptive report (Watts). 1872. p. 352 .....	A27.9:10
Exhibition of, at Arnheim, Netherlands. 1870. p. 154.....	A27.9:8
International statistics of. 1885. No. 23. p. 15 .....	A27.9:23
Machinery and (Dunlap). p. 416 .....	A1.1:863

	<b>Index</b>
	<b>Classification no.</b>
Agricultural imports:	
Average prices for. 1901. p. 806 .....	A1.10:901
Great Britain. 1868-69. p. 143 .....	A27.9:8
Note on. 1866. p. 18 .....	A27.9:4
Sources of, of U. S.—	
1892-96 (Hitchcock) .....	A12.4:12
1894-98 .....	A12.3:17
1895-99 .....	A12.3:21
1896-1900 .....	A12.3:24
1897-1901 .....	A12.3:28
Tables of—	
1868-69. p. 299 .....	A27.9:7
1868-69 continued .....	A27.9:8
1871. p. 131 .....	A27.9:9
1871-72. p. 28 .....	A27.9:11
1893. p. 490 .....	A27.9:31
United Kingdom, 1896-1900 (Hitchcock). 1902 .....	A12.3:26
Agricultural imports and exports, reports on, 1893 to 1899 .....	A12.4:
Agricultural institutions, meteorological work for (Harrington).	
1892 .....	A10.3:10
Agricultural institutions founded on Congressional grant of 1862, what work is legitimate to? (Peabody). 1882. p. 42 .....	A1.8:22
Agricultural libraries:	
Development of (Greathouse). 1899. p. 491 .....	A1.10:899
Statistics of, those in U. S. 1899. p. 757 .....	A1.10:899
Agricultural literature:	
Classification for (Cutter). 1899. p. 50 .....	A10.3:65
Index to—	
explanation of, etc. 1900. p. 624 .....	A10.3:80
key to. 1893 .....	A10.4:23
letter of Director of Experiment Stations office, relative to.	
1891 .....	A10.4:22
outline of (True). 1902 .....	A10.4:47
plan for, reported by committee of Association of American Agricultural Colleges and Experiment Stations.	
1897-98. p. 18 .....	A10.3:49
same, 1899. p. 50 .....	A10.3:65
same, 1901. p. 73 .....	A10.3:99
Terms of sale of .....	A10.2:C18
Agricultural machinery. <i>See</i> Agricultural implements.	
Agricultural materials, inspection of, by Agricultural experiment stations in U. S. 1900. (Allen and others.) p. 465 .....	A10.3:80
Agricultural meteorology. <i>See</i> Meteorology.	
Agricultural museum. <i>See</i> Agriculture department—Berlin.	
Agricultural nomenclature. <i>See</i> Agricultural experiment stations, nomenclature used in publications of.	
Agricultural officials of foreign countries, list of:	
1899. p. 720 .....	A1.10:899
1900. p. 674 .....	A1.10:900
1901. p. 640 .....	A1.10:901
<i>See also</i> Agricultural experiment stations.	
Agricultural ornithology (Michener). p. 287 .....	A1.1:863
Agricultural patents of year 1869. p. 315 .....	A1.1:869
Same. 1871. p. 211 .....	A1.1:871
<i>See also</i> Patents.	
Agricultural pests. <i>See</i> Caterpillars—Fungi—Insects—Weeds.	
Agricultural products:	
American—	
foreign markets for, testimony before Industrial Commission relative to (Hitchcock). 1901 .....	A1.8:67
Germany as an importer of. 1894. p. 32 .....	A27.9:32
Annual, modes of estimating. 1864. No. 2. p. 7 .....	A27.9:2
Are they declining? 1876. p. 457 .....	A27.9:14
Australia. 1863-72. p. 516 .....	A27.9:10
Diversity in (Pleasants). p. 247 .....	A1.1:867
European customs duties on. 1885. No. 18. p. 39 .....	A27.9:23

# Index

	Classification no.
<b>Agricultural products—Continued</b>	
Exports of—	
1890-94. p. 540 .....	A1.10:894
1891-95. p. 543 .....	A1.10:895
1897. p. 736 .....	A1.10:897
1898. p. 712 .....	A1.10:898
1899. p. 829 .....	A1.10:899
1900. p. 847 .....	A1.10:900
1901. p. 799 .....	A1.10:901
Farm prices of—	
1890-94. p. 545 .....	A1.10:894
1895. p. 536 .....	A1.10:895
1894-98. p. 692 .....	A1.10:898
1890-99. p. 793 .....	A1.10:899
For American consumption (Dodge). 1884. No. 11, p. 41; no. 13, p. 23.....	A27.9:22
Foreign tariffs on. 1891. p. 538 .....	A27.9:29
Foreign trade in—	
1892. p. 308 .....	A27.9:30
1893-97 (Hitchcock) .....	A12.3:10
1894-98 .....	A12.3:15
1890-99 .....	A12.3:19
1891-1900 .....	A12.3:23
1892-1901 .....	A12.3:27
Imports of—	
1891-94. p. 543 .....	A1.10:894
1891-95. p. 548 .....	A1.10:895
1897. p. 736 .....	A1.10:897
1898. p. 705 .....	A1.10:898
1899. p. 823 .....	A1.10:899
1900. p. 840 .....	A1.10:900
1901. p. 792 .....	A1.10:901
Permanency of. 1891. p. 135.....	A27.9:29
Prices and (Holmes). 1897. p. 577.....	A1.10:897
Principal, of world, production and distribution of. 1893.....	A27.8:5
Prussia. 1869. p. 149.....	A27.9:7
Trade of San Francisco in. 1864-65. No. 6. p. 28.....	A27.9:3
United States and Canada. 1865. No. 9. p. 18 .....	A27.9:3
Wholesale prices of, in leading cities in U. S.—	
1890-1894. p. 534 .....	A1.10:894
1895. p. 537 .....	A1.10:895
1899. p. 799 .....	A1.10:899
1900. p. 823 .....	A1.10:900
1901. p. 773 .....	A1.10:901
<i>See also American products — Crops — Farm products.</i>	
Agricultural products and manufactures, 1865-66. p. 433.....	A27.9:4
Agricultural resources:	
Alaska (Dall). p. 170 .....	A1.1:868
California (Dunn). p. 581 .....	A1.1:866
Eastern Oregon and Washington Territory (Ritz). 1869. p. 384* .....	A27.9:7
Jefferson County, Colorado (Berthoud). 1869. p. 381* .....	A27.9:7
Montana Territory. p. 431.....	A1.1:871
Wyoming Territory. p. 548.....	A1.1:870
Agricultural resources and capabilities:	
Hawaii (Stubbs). 1901 .....	A10.3:95
Porto Rico (Knapp). 1901.....	A10.2:P83
Agricultural schools. <i>See Agricultural colleges—Welch, A. S.</i>	
Agricultural science:	
Pioneer in; Edmund Ruffin (Cutter). 1895. p. 493.....	A1.10:895
Progress in recent (Atwater). 1874. p. 26.....	A27.9:12
Work and experiments in, abstracts of reports of experiment stations on, 1889-1902 .....	A10.6:
Agricultural season, length of (Abbe). p. 255.....	A29.6:27
Agricultural seeds. <i>See Seeds.</i>	
Agricultural societies:	
Foreign, exchanges with. p. 256 .....	A1.1:869

\* By a misprint, this page number appears twice.

**Agricultural societies—Continued**

List of—

1867. p. 364 .....	A1.1:867
1870 .....	A1.8:4
1872 .....	A1.8:5
1876 .....	A1.8:12

Notes on. 1871. p. 471 .....

A27.9:9

*See also* Allied National Agricultural Societies of America—Illinois State Agricultural Society—Montgomery County, Md., Agricultural Society—New York Agricultural Society.

**Agricultural statistics:**

Based on census returns. 1894. p. 741 .....	A27.9:32
British colonies. 1870. p. 291 .....	A27.9:8
same. 1875. p. 455 .....	A27.9:13
Canada. 1884. No. 4. p. 40 .....	A27.9:22
Centennial album of (Dodge). 1876 .....	A27.2:Ag8
Colorado. 1869. p. 296 * .....	A27.9:7
Eleventh U. S. census, discussion of (Hyde). p. 12 .....	A4.3:11
European. 1877. p. 577 .....	A1.1:877
Exhibits illustrating, at World's Industrial and Cotton Exposition at New Orleans, La. (Dodge). 1885 .....	A1.8:40

**Great Britain—**

1866. p. 340 .....	A27.9:4
1867. p. 58 .....	A27.9:5
1868. p. 407 .....	A27.9:6
1869-70. p. 142 .....	A27.9:9

India. 1875. p. 448 .....

A27.9:13

**Ireland—**

1866. p. 383 .....	A27.9:4
1867. p. 338 .....	A27.9:5
1868. p. 408 .....	A27.9:6
1870. p. 435 .....	A27.9:8
1872. p. 496 .....	A27.9:10
1875. p. 453 .....	A27.9:13
1876. p. 484 .....	A27.9:14

Monroe County, Iowa. 1869. p. 301 \* .....

A27.9:7

Netherlands. 1886. p. 406 .....

A27.9:24

**Official, of foreign countries—**

1892. p. 79 .....	A27.9:30
1893. p. 78 .....	A27.9:31

Ontario. 1874. p. 462 .....

A27.9:13

Practical hints from (Dodge). p. 146 .....

A1.1:873

**Reports and tables of—**

1859 and 1862. p. 546 .....	A1.1:862
1864. No. 6. p. 22 .....	A27.9:2
1882. p. 23 .....	A27.9:20

Uruguay. 1894. p. 268 .....

A27.9:32

Utah. 1865. p. 90 .....

A27.9:4

Value and history. 1882. p. 149 .....

A1.8:22

**Agricultural survey:**

South (Peters). 1867. p. 192 .....

A27.9:5

Wyoming (Hoyt). 1893 .....

A27.8:7

Agricultural syndicates of France. 1889. p. 523 .....

A27.9:27

Same. 1890. p. 577 .....

A27.9:28

Agricultural topography and resources of Montana Territory. p. 431 .....

A1.1:871

Agricultural wages in France. 1876. p. 421 .....

A27.9:14

**Agriculture:**

Aided by other industries. 1884. No. 4. p. 21 .....

A27.9:22

Algerian, note on. 1876. p. 433 .....

A27.9:14

**American—**

condition of. 1873. p. 51 .....

A27.9:11

weeds of (Darlington). p. 509 .....

A1.1:865

Angora, notice of receipt of letter from Minister Terrell relative to.

A1.2:An4

Animal and insect enemies of, conflict of Russian *zyemstvos* with (Morachevski). 1902. p. 61 .....

A9.6:38

Arbor day, relation to (Skinner). p. 34 .....

A1.8:56

\* By a misprint, this page number appears twice.



# Index

	Classification no.
<b>Agriculture—Continued</b>	
Australasia. 1888. p. 284 .....	A27.9:26
Biological survey and. 1890. p. 125 .....	A5.5:3
Birds, some common, in their relation to (Beal) .....	A1.9:54
Bolivia. 1891. p. 546 .....	A27.9:29
Bosnia and Herzegovina, development of. 1894. p. 197 .....	A27.9:32
Brazil. 1891. p. 196 .....	A27.9:29
California—	
notes on. 1872. p. 199 .....	A27.9:10
same, for 1862 .....	A1.1:862
same (Hilgard). p. 476 .....	A1.1:878
situation in (Mead). 1901. p. 17 .....	A10.3:100
Caucasus. 1893. p. 202 .....	A27.9:31
Centennial of American Independence, relation to. p. 288 .....	A1.1:871
Chemistry in its relation to progress of (Wiley). 1899. p. 201 ..	A1.10:899
Chile. 1891. p. 285 .....	A27.9:29
China. 1893. p. 23 .....	A27.9:32
Chinese labor in. p. 572 .....	A1.1:870
Colleges of. <i>See</i> Agricultural colleges.	
Colorado, notes on (Thomas). 1869. pp. 284,* 379* .....	A27.9:7
Common schools. 1868. p. 92 .....	A27.9:6
same (Adams). 1885. p. 174 .....	A1.7:9
Conditions and resources of U. S., circular on (Newton). 1862 ..	A1.8:1
Conditions in U. S., general, as related to work of agricultural experiment stations (Smith). 1900. p. 19 .....	A10.3:80
Contributions of, to international commerce. 1891. p. 77 .....	A27.9:29
Cooperation in. 1874. p. 501 .....	A27.9:12
Cornell University (Craig). 1901. p. 137 .....	A10.3:99
Correspondence courses in (Craig). 1902. p. 50 .....	A10.3:110
Cotton States, condition of (Howard). p. 215 .....	A1.1:874
Course in, in East, principles underlying formation of (Roberts). 1900. p. 65 .....	A10.3:76
same, in South (Coates). 1900. p. 59 .....	A10.3:76
Cuckoos and shrikes in their relation to. 1898 .....	A5.3:9
Departments of, in land-grant colleges, requirements for admission to and cost of attendance. 1900. p. 674 .....	A1.10:900
Depression in, and its causes. 1890. p. 88 .....	A27.9:28
Ecuador. 1891. p. 484 .....	A27.9:29
Education and research in, in U. S. (True). 1894. p. 81 .....	A1.10:894
Education in. <i>See</i> Agricultural colleges and experiment sta- tions—Agricultural education.	
Educational forces in U. S. relating to cooperation of Department of Agriculture with (Willits). p. 65 .....	A1.1:891
English sparrow in its relation to (Barrows). 1889 .....	A5.3:1
Estimation and importance of ash constituents of plants to (Tol- lens). 1902. pp. 207, 305 .....	A10.6:13
European, American competition with. 1883. No. 64. p. 31 ..	A27.9:21
Experiment, its conception and methods of procedure (Bolley). 1898. p. 47 .....	A10.3:49
Experimental, at meteorological stations (Abbe). 1902. p. 410 ..	A29.6:30
Facts in, current—	
1868. p. 435 .....	A1.1:868
1869. p. 428 .....	A1.1:869
1870. p. 438 .....	A1.1:870
1871. p. 228 .....	A1.1:871
1872. p. 433 .....	A1.1:872
1873. p. 272 .....	A1.1:873
1874. p. 265 .....	A1.1:874
<i>See also</i> Farm facts and experiments.	
Foreign—	
investigations in, abstracts of reports of agricultural experi- ment stations on, 1889-1902 .....	A10.6:
notes on, monthly .....	A27.9:
France. 1893. p. 4 .....	A27.9:31
French prizes in. 1884. No. 9. p. 44 .....	A27.9:22
French publications relating to, notes from recent. p. 626 .....	A1.1:869

\* By a misprint, this page number appears twice.



**Agriculture—Continued**

French schools of. 1874. p. 212.....	A27.9:12
Georgia, climate, soil, and (Hemphill). 1882 .....	A1.6:47
German, letter on (Klippart). 1865. No. 6. p. 6.....	A27.9:3
Grasses needed for, in U. S. (Vasey). 1885. p. 168.....	A1.7:9
Great Britain's returns. 1867. p. 379 .....	A27.9:5
Guianas. 1891. p. 682 .....	A27.9:29
Hawks and owls in their relation to (Fisher). 1893.....	A5.3:3
History of, of U. S. (Poore). p. 498 .....	A1.1:866
Hot waves; conditions which produce them, and their effect on agriculture (Burrows). 1900. p. 325.....	A1.10:900
Hundred years' progress in (Flint). p. 275 .....	A1.1:872
Idaho Territory (Whitson). 1869. p. 369.....	A27.9:7
Improvement in. 1874. p. 99 .....	A27.9:12
India, account of (Siva). 1874. p. 389.....	A27.9:12
Industries, other, in their relation to—	
1871. p. 449 .....	A1.1:871
1883. No. 3. p. 21.....	A27.9:21
1884. No. 4. p. 21.....	A27.9:22
Industry in, our new (Roberts). 1901. p. 124.....	A10.3:99
Investigations in. See Agricultural experiment stations, and ref- erences thereunder.	
Italy. 1871. p. 204 .....	A27.9:9
same (Andrews). p. 283.....	A1.1:876
Japan (Capron). p. 364 .....	A1.1:873
same, 1891. p. 563 .....	A27.9:29
Lane County, Oreg. 1870. p. 84.....	A27.9:8
Maine, some outlines of (Boardman). p. 39.....	A1.1:862
Mammalogy and ornithology of New England in its relation to. (Samuels). p. 265.....	A1.1:863
Meteorologist, work of, for benefit of (Bigelow). 1899. p. 71...	A1.10:899
Mexico (Hinton). 1884. No. 13. p. 27.....	A27.9:22
Morocco (Collins). p. 499 .....	A1.1:862
Mortgage a burden upon. 1886. p. 189.....	A27.9:24
Nebraska. 1869. p. 140.....	A27.9:7
Netherlands. 1869. p. 387.....	A27.9:7
New Jersey, southern. 1868. p. 140 .....	A27.9:6
New Mexico, notes on (Thomas). 1869. p. 379* .....	A27.9:7
Old World. 1873. p. 557.....	A27.9:11
Oregon. 1871. p. 129.....	A27.9:9
Organization of (Brown). 1882. p. 108 .....	A1.8:22
Paraguay. 1891. p. 610.....	A27.9:29
Persia. 1873. p. 507.....	A27.9:11
Peru. 1891. p. 354 .....	A27.9:29
Philadelphia Centennial Exposition. 1876. p. 248.....	A27.9:14
Plant physiology in relation to (Woods). 1901. p. 127.....	A10.3:99
Portugal. 1871. p. 141 .....	A27.9:9
Potash and its functions in (Wiley). 1896. p. 107.....	A1.10:896
Practical—	
nitrogen assimilation in its application to. 1897. p. 906.....	A10.6:7
scientific work of Department of Agriculture in its relations to (Willets). p. 59.....	A1.1:890
Prices, course of, in. 1890. p. 287 .....	A27.9:28
Prizes for essays on. 1870. p. 281 .....	A27.9:8
Production and distribution of world. 1892. p. 380.....	A27.9:30
Products of, freight charges for ocean transportation of, Oct. 1, 1895–Oct. 1, 1896.....	A27.8:12
Professors of, what shall they teach? (Harwood). 1893. p. 139..	A10.3:16
Puerto Rico (Stone). 1898. p. 505 .....	A1.10:898
Railroads, relation to (Richards). 1902. p. 107.....	A10.3:120
Rural schools (Powell). 1902. p. 109.....	A10.3:120
Russia. 1875. p. 36 .....	A27.9:13
Scientific notes on. p. 611 .....	A1.1:870
Scientific work of Agriculture Department in (Dabney). 1895. p. 63	A10.3:24
Scotland (Higgins.) p. 213 .....	A4.1:898
Seasons, natural phenomena of, connection with (Russell). p. 329..	A1.1:864

\* By a misprint, this page number appears twice.

# Index

	Classification no.
<b>Agriculture—Continued</b>	
Secondary courses in. 1902 .....	A10.4:49
Soil ferments, important in (Wiley). 1895. p. 69.....	A1.10:895
South America, with maps and latest statistics of trade (Barnes). 1892 .....	A27.8:2
South Carolina, climate, soil, and (Hemphill). 1882 .....	A1.6:47
Spain (Cushing). p. 287.....	A1.1:876
Sparrows, relation to (Judd). 1901.....	A5.3:15
State officials in charge of—	
1898. p. 609 .....	A1.10:898
1899. p. 686 .....	A1.10:899
1900. p. 641 .....	A1.10:900
1901. p. 620 .....	A.10:901
State reports of—	
1867. p. 333 .....	A1.1:867
1868. p. 472 .....	A1.1:868
1869. p. 516 .....	A1.1:869
1870. p. 487 .....	A1.1:870
1871. p. 347 .....	A1.1:871
1872. p. 462 .....	A1.1:872
1873. p. 375 .....	A1.1:873
1874. p. 381 .....	A1.1:874
1876. p. 363 .....	A1.1:876
Statistics, practical hints, etc .....	A27.9:
<i>See also</i> Agricultural statistics.	
Surplus products of. 1884. No. 6. p. 29.....	A27.9:22
<b>Teaching—</b>	
how may farmers' organizations hasten, in public schools (Voorhees). 1902.....	A10.3:120
in public schools (James). 1902. p. 84 .....	A10.3:120
methods of, remarks on (Hunt). 1896. p. 35.....	A10.3:30
same (Hays). 1896. p. 37 .....	A10.3:30
same (Cooke). 1896. p. 39.....	A10.3:30
methods of, report of committee of Association of American Agricultural Colleges and Experiment Stations—	
1st report, 1896. p. 57.....	A10.3:41
same, 1896 .....	A10.4:32
2d report, 1898. p. 29 .....	A10.3:49
same.....	A10.4:37
3d report, 1899. p. 79 .....	A10.3:65
same.....	A10.4:39
4th report, 1900. p. 37 .....	A10.3:76
same.....	A10.4:41
5th report, 1901. p. 86 .....	A10.3:99
same.....	A10.4:45
report on (Harris). 1895. p. 43.....	A10.3:24
successful experiment in. 1873. p. 277 .....	A27.9:11
Territories. p. 601 .....	A1.1:869
Texas, southern. 1889. p. 264.....	A27.9:27
Tropical islands of U. S. (Cook). 1901. p. 349 .....	A1.10:901
Tuspan, Mexico (Johnson). 1874. p. 498.....	A27.9:12
United States' progress in (Holmes). 1899. p. 307 .....	A1.10:899
Uruguay. 1891. p. 671 .....	A27.9:29
Valley of Rio Grande. 1870. p. 479 .....	A27.9:8
Virginia, status of. 1870. p. 267.....	A1.1:870
Washington Territory, statistics of (Simmons). 1869. p. 370...	A27.9:7
Western America, condition of. 1871. p. 329 .....	A27.9:9
<i>See also</i> Alaska — American products — Animals, domestic — Barns — Bees — Botany — Butter — Cattle — Cereal crops — Cheese — Coffee — Corn — Cotton — Cow — Crops — Dairy — Domestic science — Drainage — Ensilage — Farmer — Farm- ing — Farms — Fertilizers — Field crops — Flax — Forestry — Fruit — Gardening — Grain — Grape — Grass — Greenhouses — Irrigation — Maize — Manures — Milk — Pacific coast — Poul- try — Soils — Southern agriculture — Sugar — Tobacco — Trees — Vegetables — Wheat — Wool — Yukon Valley — headings beginning with Agricultural.	

	<b>Index</b>
	<b>Classification no.</b>
Agriculture, Assistant Secretary of, duties of, special report on (Willits). p. 67.....	A1.1:892
Agriculture, Secretary of.....	A1.
Agriculture and agricultural science, some books on, published 1893-96 (Hall).....	A10.4:31
Agriculture and botany of Rocky Mountain basins (Thompson). p. 125.....	A1.1:866
Agriculture and chemistry section, Association of American Agricultural Colleges and Experiment Stations, report of:	
1892. p. 129.....	A10.3:16
1893. p. 91.....	A10.3:20
1894. p. 77.....	A10.3:24
1895. pp. 10, 83.....	A10.3:30
1896. pp. 13, 88.....	A10.3:41
1897. pp. 22, 69.....	A10.3:49
1898. pp. 27, 110.....	A10.3:65
1899. pp. 14, 66.....	A10.3:76
1900. p. 102.....	A10.3:99
1901. p. 68.....	A10.3:115
<i>See also</i> Agriculture section — Chemistry section.	
Agriculture and Forestry, Exposition of. <i>See</i> Belgium — Vienna.	
Agriculture and industries, ideal department of (Tisserand). 1896. p. 543.....	A1.10:896
Agriculture and related sciences, some books on, published 1896-98, list of.....	A10.4:38
Agriculture and rural economy, American works on. p. 597.....	A1.1:868
Agriculture Committee, House of Representatives:	
Hearings by, on subject of good roads. 1893. p. 85.....	A10.3:14
Report of. 1875. p. 120.....	A27.9:13
Agriculture Department:	
Annual reports, index to, 1837-1876.....	A1.8:14
same, supplement 1877-85.....	A1.8:42
same, 1837-93 (Thompson).....	A21.3:1
Appropriations and expenditures, 1839 to 1877, statement of.....	A1.8:13
Appropriations for fiscal years—	
1896 and 1897. p. 658.....	A1.10:896
1897 and 1898. p. 622.....	A1.10:897
1897, 1898, and 1899. p. 596.....	A1.10:898
1898, 1899, and 1900. p. 670.....	A1.10:899
1899, 1900, and 1901. p. 636.....	A1.10:900
1900, 1901, and 1902. p. 614.....	A1.10:901
Architect's report (Cluss). p. 15.....	A1.1:868
Assistants in, civil service examinations for (Abbe). 1898. p. 564.....	A29.6:26
Building and grounds. p. 191.....	A1.1:868
Building for, specifications, workmanship, and materials required in (Cluss and Kammerhueber). 1867.....	A1.2:Sp3
Bulletins and circulars of, available for free distribution, circulars relative to.....	A21.5:
Bureau of Information and Exchanges in, address favoring creation of (Woodhull). 1885. p. 90.....	A1.7:9
Business methods in (Colman). 1888.....	A1.2:C71
Circulars issued by various divisions of.....	A21.2:C49
Civil service in. 1896.....	A1.4:5
same (Dabney). 1897.....	A10.4:33
Consular correspondence of (Dodge). p. 487.....	A1.1:864
Cooperation of, with educational forces in United States relating to agriculture (Willits). p. 65.....	A1.1:891
Cooperative work between experiment stations and, report of committee on (Bryan). 1901. p. 59.....	A10.3:99
Correspondence of, foreign and domestic. 1877. p. 527.....	A1.1:877
same. 1880. p. 609.....	A1.1:880
Cost and profit of. 1871. p. 124.....	A27.9:9
Economic plants in collection of, catalogue of (Saunders).....	A1.8:47
Employees of—	
number, status, and compensation; July 1, 1897.....	A1.4:6

# Index

	Classification no.
<b>Agriculture Department—Continued</b>	
<b>Employees of—Continued</b>	
outside of Washington, leave of absence not allowed to, letter relative to .....	A1.2:L48
traveling expenses of, allowances for .....	A1.2:T69
<b>Exhibits of, at Philadelphia, Centennial Exhibition, 1876—</b>	
note on. p. 133 .....	A27.9:14
vegetable fibers in (Dodge). p. 497 .....	A1.1:879
<b>Exotic collection of, plants in, descriptive catalogue of (Saunders). 1872 .....</b>	A1.8:6
<b>Experimental farm of. 1866. p. 241 .....</b>	A27.9:4
<b>Financial transactions with, regulations governing. 1894 .....</b>	A2.2:F49
<b>Fiscal regulations of .....</b>	A2.2:F52
<b>Functions of, notice as to various .....</b>	A1.2:Ag8 <sup>4</sup>
<b>Grass and forage-plant investigations in (Williams). 1901. p. 148 ..</b>	A10.3:99
<b>Historical sketch of, its objects and present organization (Great-house) .....</b>	A21.3:3 <sup>1</sup>
<b>History and objects (Swank). 1872 .....</b>	A1.8:7
<b>Indexes and lists—</b>	
annual reports, 1837-1876 .....	A1.8:14
same, supplement, 1877-1885 .....	A1.8:42
same, 1837-1893 (Thompson) .....	A21.3:1
general index for reports on agriculture, 1847-1866. p. 473 ...	A1.1:867
same, authors, with titles of their publications, 1841-1897 (Thompson) .....	A21.3:4
same, list by titles, 1840 to June, 1901. (Handy and Cannon) .....	A21.3:6
same, 1889-1893 .....	A1.8:55
same, 1841 to June 30, 1895 (Hasse) .....	A17.3:9
<i>See also</i> Animal Industry.	
<b>Letter as to work and needs (Le Duc). 1880 .....</b>	A1.2:Ag8 <sup>3</sup>
<b>Library of—</b>	
botany publications in, catalogue of. 1902 .....	A17.3:42
publications of .....	A17.
<b>Museum of, donations to—</b>	
1862-63. p. 615 .....	A1.1:862
1867. p. 470 .....	A1.1:867
1869. p. 636 .....	A1.1:869
1870. p. 673 .....	A1.1:870
1872. p. 512 .....	A1.1:872
1873. p. 447 .....	A1.1:873
<b>Mutual interests and relations of farmer and, farmers' institute as medium for developing (True). 1902. p. 102 .....</b>	A10.3:120
<b>Notice of receipt of communications on various subjects. 1893 ..</b>	A1.2:N84
<b>Nutrition investigations of, development of (True and Milner). 1899. p. 403 .....</b>	A1.10:899
<b>Organization of—</b>	
1895. p. 523 .....	A1.10:895
same, with list of exhibits at Cotton States and International Exposition, Atlanta, Ga .....	A21.2:At6
1896. p. 555 .....	A1.10:896
1897. p. 619 .....	A1.10:897
1898. p. 593 .....	A1.10:898
1899. p. 667 .....	A1.10:899
1900. p. 633 .....	A1.10:900
1901. p. 611 .....	A1.10:901
1901-1902 .....	A21.4:1
<b>Oscinidæ and Agromyzidæ reared at, habits of (Coquillett). 1898. p. 70 .....</b>	A9.6:10
<b>Philadelphia Centennial Exhibition, 1876, participation in (Saunders) .....</b>	A1.2:P53
<b>Promotions, etc., regulations governing. Dec. 1, 1896 .....</b>	A1.2:P94
<b>Publication work of, as affected by law. 1897 .....</b>	A21.2:P96 <sup>1</sup>
<b>Publications of—</b>	
abstracts of, 1889-1902 .....	A10.6:
arranged by bureaus and offices, with their various series .....	A1-A29
circulars regarding .....	A21.2:P96 <sup>2</sup>

	<b>Index</b>
	Classification no.
<b>Agriculture Department—Continued</b>	
<b>Publications of—Continued</b>	
distribution of, orders relative to.....	A1.2:P96
indexes. <i>See</i> Agriculture Department, indexes and lists.	
lists of available, etc .....	A21.2:
monthly list.....	A21.6:
notes regarding, list, etc.—	
1895. p. 616 .....	A1.10:895
1896. p. 636 .....	A1.10:896
1897. p. 627 .....	A1.10:897
1898. p. 601 .....	A1.10:898
1899. p. 676 .....	A1.10:899
1900. p. 686 .....	A1.10:900
1901. p. 683 .....	A1.10:901
price lists of .....	A21.8:
special list of those available for distribution to correspond-	
ents and others rendering service to Department .....	A21.2:P96 <sup>s</sup>
Relation of, to farmers' institutes (True). 1902. p. 22.....	A10.3:110
Relation of Weather Bureau to (Calvert). 1899. p. 54.....	A29.3:24
Scientific aids and assistants of, note on. 1899. pp. 213, 548....	A29.6:27
Scientific work of—	
address on (Dabney). 1895. p. 63.....	A10.3:24
in its relation to practical agriculture (Willeys). p. 59.....	A1.1:890
Seed and plant introduction work since 1897 (Smith) 1901. p. 145.	A10.3:99
Seed tests. <i>See</i> Seeds.	
Sketch of. 1871. p. 257.....	A27.9:9
Student assistants in. 1901. p. 687 .....	A1.10:901
Tobacco culture (Whitney). 1901. p. 108.....	A10.3:99
United States, plants in, catalogue of. 1891 .....	A1.2:P69
Unskilled laborer in, instructions to applicants for appointment	
as. 1902 .....	A16.2:In7
same, regulations governing appointments. 1902 .....	A16.2:R26
What it is doing for irrigation (Mead). 1902 .....	A10.4:48
Work of, as illustrated at Atlanta Exposition. 1895. p. 503.....	A1.10:895
Agriculture Department and Cotton Exchange reports. 1886., p. 496.	A27.9:24
Agriculture Department and its work (Hill). 1898 .....	A21.2:Ag8
Agriculture section, Association of American Agricultural Colleges	
and Experiment Stations, report of:	
1890. pp. 81, 108.....	A10.5:3
1891. p. 89.....	A10.3:7
1892. p. 28.....	A10.3:16
<i>See also</i> Agriculture and chemistry section.	
Agriculturist, work of Signal Service Bureau for (Birkheimer). 1882.	
p. 110 .....	A1.8:22
same, 1885, p. 191.....	A1.7:9
Agriculturists, convention of, held in Department of Agriculture,	
proceedings of, Jan. 10-18, 1882. 1882 .....	A1.8:22
same, second convention, proceedings of, Jan. 23-29, 1883. 1883.	A1.7:2
Agrilus, food plants and injury of, North American species of (Chit-	
tenden). 1900. p. 64.....	A9.6:22
Agromyzidæ, reared at Department of Agriculture, habits of (Coquil-	
lett). 1898. p. 70.....	A9.6:10
Agronomic Institute, National, of France. 1876. p. 490 .....	A27.9:14
Agropyron, native and introduced species of (Scribner and Smith).	
1897. p. 23 .....	A3.3:4
Agrostological notes, circular .....	A3.4:27
Agrostology:	A3.
Economic and scientific, progress of (Scribner). 1899. p. 347 ..	A1.10:899
Systematic, recent additions to. 1899.....	A3.4:15
Agrostology Division, Agriculture Department .....	A3.
Field work of; review and summary of work done since organiza-	
tion of division, July 1, 1895 (Shear). 1901 .....	A3.3:25
Publications of, list of (Scribner). 1901.....	A3.4:36
same (Spillman). 1902 .....	A19.2:P96
Work of, for farmer (Scribner). 1897. p. 160 .....	A1.10:897
Aiguillon, France, black rot of grapevine, treatment of, experi-	
ments made at, in 1888 (Prillieux). 1889. p. 49 .....	A6.3:10

# Index

	Classification no.
Aiken, D. Wyatt. Grange, its origin, progress, and educational purposes. 1883 .....	A1.6:55
Same, p. 56.....	A1.7:2
Ailanthus silkworm of China, additional observations on (Morris). p. 390 .....	A1.1:862
Air:	
Cold, in low lands (Abbe). 1896. p. 14.....	A29.6:24
Currents of, in thunderstorms, note on (Abbe). 1899. p. 366...	A29.6:27
Exploration of, with kites, progress at Blue Hill Observatory, Mass. (Rotch). 1898. p. 355 .....	A29.6:26
Free, at great altitudes, variations of temperature of (Abbe). 1902. p. 316 .....	A29.6:30
Liquid, note on (Abbe). 1897. p. 18 .....	A29.6:25
same; 1899, p. 110.....	A29.6:27
Temperature of, monthly notes on, July, 1891-Oct., 1902.....	A29.6:
Upper, chemical composition of, notes on (Abbe). 1897. p. 61.	A29.6:25
Warm, attending low areas (Abbe). 1894. p. 464 .....	A29.6:22
<i>See also</i> Aerial observations—Atmosphere—Ballooning—Barometer—Meteorology.	
Aitken, A. P. Fiber determination in Scotland. 1894. p. 172.....	A7.3:43
Aitken, John. Atmospheric dust observations. 1896. p. 734.....	A29.3:11 <sup>s</sup>
Alabama:	
Cattle trade and dairy interests of (Perry). p. 335.....	A4.1:885
Cotton in, 1866. p. 280 .....	A27.9:4
Farm resources and products of. 1868. p. 83 .....	A27.9:6
Farmers' institute work accomplished in (Cary). 1902. p. 15 ..	A10.3:120
Negro in, dietary studies with reference to food of, in 1895 and 1896 (Atwater and Woods) .....	A10.3:38
Plant life of (Mohr). 1901.....	A6.5:6
Road improvement in, extract from governor's message (Johnston). p. 1 .....	A22.4:33
<i>See also</i> Jefferson County.	
Alamance County, North Carolina, soil survey of (Coffey and Hearn). p. 297 .....	A26.5:901 <sup>1</sup>
Alamos, Mexico, plants collected by Edward Palmer at, in 1890, list of (Rose). 1891. p. 91.....	A6.5:1
Alaska:	
Agricultural capabilities of, investigation of—	
1st report, 1897 .....	A10.3:48
2d report, 1898 .....	A10.3:62
3d report, 1899 (Georgeson) .....	A10.3:82
4th report, 1900 (Georgeson) .....	A10.3:94
Agricultural experiments in (Georgeson). 1898. p. 515 .....	A1.10:898
same, p. 7 .....	A10.3:62
Agricultural outlook of coast region of (Evans). 1897. p. 553 ..	A1.10:897
Agricultural resources of (Dall). p. 170.....	A1.1:868
Agriculture in—	
1893. p. 75 .....	A27.9:31
1898. (Evans). p. 4 .....	A10.3:48
1898. (Killin). p. 29 .....	A10.3:48
Botanical survey in 1898 (Evans). p. 48.....	A10.3:62
Climate and crop report of, 1898 (Ball). p. 548.....	A29.6:26
Climate of (Henry)—	
1897. p. 248 .....	A29.6:25
1899. p. 50 .....	A10.3:62
Climate of (Moore). 1897 .....	A29.2:A11
Farmers in, pioneer, suggestions to (Georgeson). 1902.....	A10.10:1
Farmers' institute work accomplished in (True). 1902. p. 33 ..	A10.3:120
Food fishes of. p. 375 .....	A1.1:870
Interior of, reconnoissance along trail from Eagle to Valdez (Jones). p. 283 .....	A10.1 <sup>2</sup> :901
Meteorological data, 1874-1901 (Kimball). p. 369 .....	A29.6:30
Meteorological observations in—	
1894 (Tibbey). p. 174 .....	A29.6:22
1895 (Abbe). p. 256.....	A29.6:23
1898 (Henry). p. 154 .....	A29.6:26



	<b>Index</b>
	<b>Classification no.</b>
Alaska—Continued	
Weather Bureau service in (Ball). 1898. p. 254 .....	A29.6:26
same (Abbe). 1899. p. 59 .....	A29.6:27
See also Circle City—Cook Inlet region—Copper River country— Dyea—Eagle—Kenai experiment station—Nome, Cape—St. Michael—Tanana Valley—Yakutat Bay—Yukon Valley.	
Alaska agricultural experiment stations:	
Annual report for 1901 (Georgeson.) p. 239.....	A10.1 <sup>2</sup> :901
Bulletins of.....	A10.10:
Alaska and northwestern coast, grasses of, plates and descriptions of (Vasey.) 1892 .....	A6.2:N82 <sup>2</sup>
Same .....	A6.3:13
Albany, N. Y.:	
Elm leaf-beetle in (Lintner). 1895. p. 50 .....	A9.6:2
Tornado at, March 26, 1895. Report of (Sims). p. 92.....	A29.6:23
"Albatross," U. S. S., plants collected by in 1887-91 along western coast of America, list of. 1892. p. 135.....	A6.5:1
Albert, <i>Prince of Monaco</i> . Meteorological observatories, creation of, on islands connected by cable with a continent. 1894. p. 158.	A29.3:11 <sup>1</sup>
Albumen, determination of, in cow's milk (Van Slyke). 1894. p. 188.	A7.3:43
Albuminoid nitrogen, determination of, error in present official method for (Snyder). 1891. p. 39.....	A7.3:31
Albuminoids in milk, estimation of (Sebelien). 1889. p. 169.....	A7.3:24
Alcohol:	
Sulphurous acid in manufacture of (McMurtrie). 1873. p. 32...	A27.9:11
Use of, in manufacture of sugar (Gilbee). 1891. p. 8 .....	A7.3:34
Withdrawal of, from bond for scientific purposes (Richards). 1889. p. 71 .....	A7.3:24
Alcoholic beverages, fermented, adulteration of (Crampton.) 1887. p. 263 .....	A7.3:13 <sup>3</sup>
See also Liquors.	
Aldrich, J. M.:	
Insects of North Idaho, notes on. 1894. p. 201.....	A9.7:7
South Dakota, entomological notes. 1891. p. 67 .....	A9.7:4
Spraying without pump, preliminary notice. 1894. p. 114....	A9.7:7
same, report on. 1895. p. 28 .....	A9.6:2
Aldrich, William S. Engineering experiment stations, report of committee on, before Convention of American Agricultural Colleges and Experiment Stations. 1896. p. 116.....	A10.3:41
Aletia. See Cotton worm.	
Aleurodidæ, American, contributions toward a monograph of. (Quaintance.) 1900. p. 9 .....	A9.8:8
See also Aleyrodes citri.	
Alexander, Edward Porter:	
Hurricanes, destructive forces of, and conditions of safety and danger, 1896. p. 153 .....	A29.6:24
Storm waves of South Carolina and Texas. 1900. p. 381 .....	A29.6:28
Alexander, William H.:	
Basseterre, St. Kitts, W. I. Flood of Jan., 1880, at. p. 196.....	A29.6:27
Climatology of Antigua, W. I. 1901. p. 165.....	A29.6:29
Climatology of St. Kitts— 1899. p. 582 .....	A29.6:27
1900. p. 330 .....	A29.6:28
1901. p. 257 .....	A29.6:29
Hurricanes, especially those of Porto Rico and St. Kitts. 1902...	A29.3:32
Rainfall— relation of, to mountains. 1901. p. 6 .....	A29.6:29
St. Kitts, W. I. 1900. p. 487.....	A29.6:28
Reforestation and rainfall in Leeward Islands. 1901. p. 254....	A29.6:29
St. Kitts, W. I., additional observations of hurricane. 1899. p. 409 .....	A29.6:27
Thunder storms at Antigua, W. I. 1900. p. 380 .....	A29.6:28
Aleyrodes citri:	
Fungous parasite on. Preliminary notice of (Webber). 1891. p. 363 .....	A28.5:7
Report of. 1893. p. 219.....	A9.7:5
See also Aleurodidæ.	



# Index

Classification no.

Alfalfa or lucern:	
As a fertilizer. 1901. p. 6.....	A1.9:133
California. 1872. p. 296.....	A27.9:10
Cultivation of (Henderson). p. 566.....	A1.1:884
Dodders infesting (Dewey). 1898.....	A6.4:14
Report on. p. 394.....	A1.1:875
same (Smith). 1895.....	A1.9:31
Studies on growth of. 1897. p. 8.....	A1.9:56
Turkestan, report on (Kennedy). 1900.....	A3.4:25
When to cut (Langworthy). 1899. p. 24.....	A1.9:105
Alfalfa hay for hogs. 1899. p. 15.....	A1.9:97
Alfalfa silage (Beal). 1901. p. 25.....	A1.9:124
Algerian agriculture. 1876. p. 433.....	A27.9:14
Algerian durum wheats, classified list, with descriptions (Scofield). 1902.....	A19.3:7
Algiers, Africa, irrigation by artesian wells in. 1891. pt. 1. p. 369.	A15.2:Ir7 <sup>2</sup>
Alkali:	
Black. See Sodium carbonate.	
Influence of, on germination and growth of plants. p. 8.....	A1.9:97
Irrigation and, recent investigations by Wyoming Experiment Station in (Buffum). 1900. p. 69.....	A10.3:76
Montana (Traphagen). 1900. p. 72.....	A10.3:76
Standard, titration of ammonium phosphomolybdate with, estimation of phosphoric acid in soils by double precipitation with molybdic solution and (Williams). 1895. p. 82.....	A7.3:47
See also Ammonia.	
Alkali lands:	
Classification of (Cameron). 1901.....	A26.3:17
Origin, value, and reclamation of (Hilgard). 1895. p. 103.....	A1.10:895
Report on (Whitney and Means). 1899.....	A1.9:88
Alkali soils:	
Certain components of, effect upon seedling plants (Kearney and Cameron). 1902. p. 7.....	A1.8:71
Chemical examination of (Seidell). 1901. p. 65.....	A26.3:18
Forage plants for cultivation on (Smith). 1898. p. 535.....	A1.10:898
Mechanical analysis, necessary modifications in (Briggs). 1900. p. 173.....	A1.8:64
Plants adapted to, throughout western portion of U. S. 1899. p. 6.	A1.9:97
Salt content of, instructions for determining in field (Whitney)..	A26.4:6
Salts in, distribution of (Hilgard). 1896. p. 66.....	A10.3:30
Solution studies of salts occurring in. 1901.....	A26.3:18
Sugar beets on, successful culture of. 1899. p. 5.....	A1.9:92
Alkali soils and vegetation, some mutual relations between (Kearney and Cameron). 1902.....	A1.8:71
Alkali soils and waters in California (Hilgard). 1888-89. p. 297...	A15.2:P94 <sup>1</sup>
Alkali solutions. See Acid and alkali solutions.	
Alkalies in soil analysis, separation of, by official method (Hopkins). 1902. p. 43.....	A7.3:67
Alkaline polysulphides, use of, for grape mildew. 1885. p. 67.....	A6.3:2
Allegan County, Mich., soil survey of (Fippin and Rice). p. 93....	A26.5:901 <sup>1</sup>
Allegheny Observatory, research at, on atmospheric radiation (Very). 1900.....	A29.5:G
Allen, —. Quassia and other hop substitutes in beer, improved method of detecting. 1887. p. 376.....	A7.3:13 <sup>3</sup>
Allen, A. B. Marsh hay, salt and fresh water. p. 296.....	A1.1:876
Allen, C. W. Address of, before Jefferson Memorial and Interstate Good Roads Convention. Apr., 1902. p. 13.....	A22.3:25
Allen, Edward T. Western hemlock. 1902.....	A13.3:33
Allen, Edwin West:	
Agricultural Colleges and Experiment Stations, American, thirteenth annual convention of Association of, 1899, report on. 1900. p. 405.....	A10.6:11
same, fourteenth annual convention, 1900. p. 404.....	A10.6:12
Chemists, Official Agricultural, Association of, convention of, 1899, report on. 1900. p. 204.....	A10.6:11
Cotton-seed meal, effect of, on quality of butter. 1900. p. 24....	A1.9:119
Cows, profitable and unprofitable, statement of. 1900. p. 21....	A1.9:114

**Index**  
Classification no.

Allen, Edwin West—Continued	
Cream, pasteurized, commercial butter cultures used in connection with. p. 21 .....	A1.9:103
Dairy work at agricultural experiment stations. 1897. p. 359...	A10.6:8
Dairying, review of recent work on. 1895. pp. 943, 1043.....	A10.6:5
Feeding of farm animals.....	A1.9:22
Feeding stuffs, control of, needs and requirements of. 1897. p. 421 .....	A1.10:897
Leguminous plants for green manuring and feeding. 1894.....	A1.9:16
Milch cows, light versus heavy grain feeding for. 1900. p. 25 ..	A1.9:119
Milk and cream, rosy, examination as to cause of. 1899. p. 26.	A1.9:107
Allen, Edwin West, Beal, Walter Henry, and Wilcox, Earley Vernon. Agricultural materials, inspection of, by agricultural experiment stations. 1900. p. 465 .....	A10.3:80
Allen, Henry L. Temperatures obtained by kites at Bergen Point, N. J. 1898. p. 161 .....	A29.6:26
Same, 1899. pp. 11, 251.....	A29.6:27
Allen, Lewis F.:	
Cattle—	
native, improvement of. p. 294 .....	A1.1:866
short-horned breed of, considered with reference to beef and dairy interests of U. S. p. 416.....	A1.1:875
live stock, American. 1876. p. 403 .....	A27.9:14
Allen, Robert G.:	
Climate and crop correspondents, Weather Bureau, how many are required? 1902. p. 195 .....	A29.3:31
Lightning, destruction by, in State of New York, Aug., 1898. p. 357.	A29.6:26
Weather observers, voluntary, book for record of instruments and flags. 1899. p. 125 .....	A29.3:24
Allen, Townsend. The Cyclone, a poem. 1902. p. 270 .....	A29.6:30
Allen, W. M. Food preservatives, provisional method for analysis of. 1902. p. 107.....	A7.3:65
Allerton, Samuel Waters. Correspondence with, relative to exportation of Canadian cattle from Boston, Mass.....	A1.2:C29 <sup>s</sup>
Allied national agricultural societies of America, officers of. 1900. p. 643 .....	A1.10:900
Same, 1901. p. 637 .....	A1.10:901
Allingham, William. Ocean storms, forecasting, and best methods of making forecasts available to commerce. 1894. p. 150....	A29.3:111
Allorhina, white grub of, note on (Townsend). 1891. p. 25.....	A9.7:4
Almanacs and Weather Bureau, notes on (Abbe). 1898. p. 21.....	A29.6:26
Almond disease caused by <i>Cercospora circumscissa</i> , remedies for (Pierce). 1891. p. 232.....	A28.5:7
Almond in southwest Utah and southeast Nevada (Judd). p. 55....	A20.1:895
Almond trees, disease of (Pierce). 1891. p. 66.....	A28.5:7
Almonds, earth. See Chufa—Spanish almonds.	
Alpaca, introduction of. p. 437 .....	A1.1:875
Alsike clover:	
Description of, translated by J. Arrhenius. p. 352.....	A1.1:865
Note on. 1866. p. 435 .....	A27.9:4
Alumina:	
Determination of, in phosphates, methods of (McDonnell). 1897. p. 47 .....	A7.3:51
Estimation of, in mineral phosphates (Lehmann). 1897. p. 61..	A7.3:51
Aluminic phosphate, high grade, action of ammoniac citrate on (Huston). 1890. p. 170 .....	A7.3:28
Aluminum, chloride of, use of, against <i>Peronospora</i> of grapevine, first results of (Comes and Deperais). 1890. p. 94 .....	A6.3:11
Aluminum scales. See Thermometers.	
Alvarado, Cal.:	
Beet-sugar factory. 1870. p. 280.....	A27.9:8
Standard Sugar Refinery, report on (Furnas). 1892. p. 91 .....	A1.8:20
Alvord, C. T. Maple sugar, manufacture of. p. 394.....	A1.1:862
Alvord, Henry Elijah:	
Address of, as president of Association of American Agricultural Colleges and Experiment Stations, at ninth annual convention. 1896. p. 20 .....	A10.3:30

# Index

Classification no.

## Alvord, Henry Elijah—Continued

Agricultural colleges, collective exhibit at World's Columbian Exposition, report on. 1893. p. 103.....	A10.3:16
Breeds of dairy cattle. 1899 .....	A1.9:106
Butter, experimental exports of. 1897. p. 83.....	A4.1:898
same, 1898-99, p. 154 .....	A4.1:899
Cattle markets and abattoirs in Europe. p. 279.....	A4.1:901
Cheese—	
good, how to select. 1896.....	A4.4:11
manufacture and consumption of. 1895. p. 453.....	A1.10:895
Creameries or butter factories; advantages, location, organization, and equipment. p. 297 .....	A4.1:895-6
Dairy—	
by-products of, utilization of. 1897. p. 509.....	A1.10:897
development of, in U. S. 1899. p. 381.....	A1.10:899
same, p. 244 .....	A4.1:899
statistics of, compilation. 1896.....	A4.3:11
Dairy cattle, breeds of. 1899. p. 137 .....	A4.1:898
Dairy herd; formation and management. 1894. p. 295 .....	A1.10:894
same. 1897 .....	A1.9:55
Dairy products at Paris Exposition of 1900. p. 194.....	A4.1:900
same, p. 599 .....	A1.10:900
Dairying, officials and associations connected with, in U. S. and Canada, list of—	
1896 .....	A4.4:10
1897 .....	A4.4:18
1898 .....	A4.4:22
1899 .....	A4.4:26
1900 .....	A4.4:29
1901 .....	A4.4:33
1902 .....	A4.4:36
Eggs, trial shipments of, to England. p. 321 .....	A4.1:899
Meats and meat products at Paris Exposition of 1900. p. 223....	A4.1:900
<i>See also, as editor, Agricultural Colleges and Experiment Stations, American Association of, proceedings of.</i>	
Alwood, William B:	
Cider, address on. 1902. p. 84 .....	A7.3:67
Hop louse, experiments with remedies against. p. 102.....	A1.1:888
same, p. 102 .....	A9.1:888
Horn fly, remedies for. 1891. p. 68 .....	A9.7:4
Insecticides, tests with, upon garden insects. 1887. p. 38 .....	A9.3:13
Ohio insects. 1886. p. 48 .....	A9.3:13
Protoparce carolina, life history of. 1898. p. 72 .....	A9.6:17
San Jose scale; is cooperation for control of practicable? 1896. p. 80.....	A9.6:6
Spray machinery, standard fittings for. 1891. p. 58.....	A9.7:4
Woolly aphis of apple, life history of, notes on. 1898. p. 70 ...	A9.6:17
Ambrosia beetles (Hubbard). 1896. p. 421.....	A1.10:896
Same (Hubbard). 1897. p. 9 .....	A9.6:7
America:	
Cavalry horses in (Morris). p. 159.....	A1.1:863
Flax culture for seed and fiber in (Dodge). 1898.....	A11.5:10
Leather, production of (Bailey). p. 419 .....	A4.1:887-8
Modern farming in (Taveau). p. 280.....	A1.1:874
Pastoral lands of, report on. p. 301.....	A1.1:870
Trichiniasis in, extent of (Salmon). p. 475 .....	A4.1:884
same. 1884. p. 269 .....	A4.2:An5
Western coast of, plants collected by U. S. S. Albatross along, in 1887-91, list of .....	A6.5:1
American Association for Advancement of Science. <i>See Entomological Club.</i>	
American Association of Farmers' Institute Workers. <i>See Farmers' Institute Workers.</i>	
American Association of State Weather Services. <i>See State Weather Services.</i>	

**Index**  
Classification no.

American breeds of fowls:	
1. Plymouth rock (McGrew). 1901 .....	A4.3:29
2. Wyandotte (McGrew). 1901 .....	A4.3:31
American Dairymen's Association, Utica, N. Y., Jan. 1871, notice of. p. 479 .....	A27.9:8
American Forestry Association, summer meeting of (Henry). 1902. p. 401 .....	A29.6:30
American grasses:	
No. 1 (Scribner) .....	A3.3:7
No. 2 (Scribner) .....	A3.3:17
No. 3 (Scribner) .....	A3.3:20
<i>See also</i> Grasses.	
American Institute Farmers' Club, report on. p. 416 .....	A1.1:869
American Pomological Society:	
Catalogue of fruits recommended for cultivation in various sections of U. S. 1897 .....	A20.3:6
same, including British provinces. 1899 .....	A20.3:8
History and progress (Wilder). p. 149 .....	A1.1:870
Richmond, Va., thirteenth session. 1871. p. 328 .....	A27.9:9
American products:	
Hamburg as a market for. 1897 .....	A12.4:14
Manchester district of England as a market for .....	A12.4:8
World's markets for .....	A12.3:
American troops returning from the East:	
Cestode, adult ( <i>Diplogonoporus grandis</i> ) of man which may occur in (Stiles and Tayler). 1902. p. 43 .....	A4.3:35
Egyptian and Japanese strongyle ( <i>Strongylus subtilis</i> ) which may possibly occur in (Stiles). 1902. p. 41 .....	A4.3:35
Larval cestode of man which may possibly occur in (Stiles and Tayler). p. 47 .....	A4.3:35
Ames, Iowa. Insecticide experiments at (Osborne). 1886. p. 23..	A9.3:11
<i>See also</i> Iowa College of Agriculture and Mechanic Arts.	
Amids, or amido-acids, nitrogen of, investigation of analytical methods for distinguishing between, and proteids (Mallet). 1898 .....	A7.3:54
Amity canal in Colorado, duty of water under (Berry). 1900. p. 159..	A10.3:86
Ammonia, results in mixed fertilizers variable (Williams). 1901. p. 28 .....	A7.3:62
Ammonium citrate:	
Action of—	
on basic slag (Huston and Jones). 1896. p. 68 .....	A7.3:49
on high-grade aluminic phosphate (Huston). 1890. p. 170..	A7.3:28
Neutrality in solution, indicator for detection of (Richardson). 1886. p. 21 .....	A7.3:12
<i>See also</i> Phosphoric acid.	
Ammonium nitrate, use of, in determination of phosphoric acid (Wheeler and Hartwell). 1892. p. 53 .....	A7.3:35
Ammonium phosphomolybdate:	
New reaction with (Ross). 1894. p. 97 .....	A7.3:43
Report on estimation of phosphoric acid by titration of yellow precipitate of (Kilgore). 1894. p. 100 .....	A7.3:43
Titration of, with standard alkali, estimation of phosphoric acid in soils by double precipitation with molybdic solution and (Williams). 1895. p. 82 .....	A7.3:47
Ammonium sulphate, nitrification of, in different soils (Withers and Fraps). 1902. p. 36 .....	A7.3:67
Amoss, William L.:	
Address of, as president of American Association of Farmers' Institute Workers, at seventh annual meeting. 1902. p. 14..	A10.3:120
Farmers' institute work accomplished in Maryland. 1902. p. 25.	A10.3:120
Question box at farmers' institutes. 1902. p. 49 .....	A10.3:110
Amoy, China, rainfall of, 1897-1902 (Fesler). p. 486 .....	A29.6:30
Amphizoa, larva of, notes on (Hubbard). 1892. p. 19 .....	A9.7:5
Amsterdam, Netherlands, dead animals in, disposition of (Vinke). p. 361 .....	A4.1:899
Analysis. <i>See</i> Chemical analysis.	
Anarsia lineatella zell. Notes on (Cordley). 1897. p. 71 .....	A9.6:9

# Index

	Classification no.
Anchor ice. <i>See</i> Ice.	
Anchylostomiasis. <i>See</i> Hookworm disease.	
Anderson, E. H.:	
Aletia, reports on. 1880-82. App., p. 37 .....	A8.1:4
same, in Mississippi in 1878. p. 352.....	A9.2:C82
Cotton worm in south Texas in spring and early summer of 1883. p. 31 .....	A9.3:3
Anderson, F. W.:	
Erysipheæ of Montana, preliminary list of. 1889. p. 188.....	A28.5:5
Fungi, few common, of Montana, brief notes on. 1889. p. 30.	A28.5:5
[Erroneously attributed to "W. F. Anderson" in book].....	A28.5:5
Fungi of Helena, Mont., supplementary notes on. 1889. p. 82..	A28.5:5
Pastoral resources of Montana. p. 311 .....	A1.1:888
same, p. 311 .....	A6.1:888
Uredineæ and ustilagineæ, notes on certain. 1891. p. 121 .....	A28.5:6
Anderson, F. W., and Kelsey, F. D. Erysipheæ upon phytoptus dis- tortions. 1889. p. 209 .....	A28.5:5
Anderson, J. T. Moisture and ether extract, experiments in de- termination of. 1890. p. 93 .....	A7.3:28
Anderson, W. B. Skim milk as food for young chickens. p. 477..	A4.1:899
<i>See also</i> , as joint author, Plumb, Charles Sumner.	
Andrew, John A. Industrial classes, education of. 1864. No. 1, p. 15 .....	A27.9:3
Andrews, C. C.:	
Address of, before Minnesota Good Roads Convention. Jan., 1894. p. 8 .....	A22.3:2
Agriculture in Italy. p. 283 .....	A1.1:876
Crops, rotation of, in Sweden. 1873. p. 363 .....	A27.9:11
Spring wheat culture in Northwest. 1882 .....	A1.6:40
Sugar beet in Sweden. 1872. p. 133 .....	A27.9:10
Swartz system of butter-making in Sweden. 1876. p. 198 .....	A27.9:14
Anemometer:	
Local anemometric peculiarities (Abbe). 1900. p. 155 .....	A29.6:28
Pressure, prize for (Abbe). 1902. p. 130.....	A29.6:30
Relative merits of anemometers in general use (Dines). 1896. p. 699 .....	A29.3:11 <sup>s</sup>
Safety fuse for lightning on (Abbe). 1898. p. 257.....	A29.6:26
Tests of (Marvin). 1900. p. 58.....	A29.6:28
Anemometry, circular of general information on (Marvin). 1893...	A29.11:D
Aneroid, new style of (Abbe). 1898. p. 566.....	A29.6:26
Aneroid barograph on Great Lakes, instructions for use of. 1897...	A29.12:An3
Aneroid barometers, report on (Marvin). 1898. p. 410.....	A29.6:26
Same (Chree). 1898. p. 547 .....	A29.6:26
Angell, Styher H., Roubaix, France. Cost of hauling farm products over wagon roads at. p. 3.....	A22.4:27
Angerer, A. W. Agricultural Experiment Stations in foreign coun- tries, work of, etc. 1872. p. 297.....	A27.9:10
<i>See also</i> , as translator, Salviate, E. de.	
Angleworms and warm rains, note on (Abbe). 1899. p. 474 .....	A29.6:27
Angora, Turkey, agriculture in. Notice of receipt of letter from Minister Terrell relative to .....	A1.2:An4
Angora goat:	
Asia Minor, industry of (Bailey). p. 493 .....	A4.1:901
California. 1891. p. 35 .....	A27.9:29
Industry, progress of, in 1901 (Thompson). p. 457 .....	A4.1:901
Information concerning (Thompson). p. 281.....	A4.1:900
same (Thompson). 1901.....	A4.3:27
same, condensed (Thompson). 1901.....	A1.9:137
Recent notes on, from bulletin of National Association of Wool Manufacturers. 1878. p. 126 .....	A1.2:Sh3
Skins of. p. 516.....	A4.1:900
Wool of. 1867. p. 254 .....	A27.9:5
Angora Goat Breeders' Convention, Feb., 1872, report on. p. 153 ..	A27.9:10
Angot, Alfred:	
Cloud photography. 1896. p. 769 .....	A29.3:11 <sup>s</sup>
Rainfall and charts of rainfall. 1902. p. 237 .....	A29.6:30
Angoumois grain moth or "Fly weevil" (Howard). 1893. p. 325.	A9.7:5

	<b>Index</b>
	<b>Classification no.</b>
Angström, Knut, on atmospheric absorption, notes on (Abbe). 1901. p. 268 .....	A29.6:29
Angström's pyrheliometer, examination of (Marvin). 1901. p. 454.	A29.6:29
Anguillula. <i>See</i> Root-knot disease, etc.	
Anguillula aceti, infection in human bladder, case of (Stiles and Frankland). 1902. p. 35 .....	A4.3:35
<i>See also</i> Aphelenchus olesistus.	
Anhalonium, North American species of, preliminary revision of (Coulter). 1892. p. 91 .....	A6.5:3
Animal, what is live weight of? (Patterson). 1893. p. 150 .....	A10.3:16
Animal body:	
Formation of fat in (Soskin). 1897. p. 179 .....	A10.6:8
Metabolism of nutrients in and source of muscular energy (Zuntz). 1897. p. 538 .....	A10.6:7
Animal breeding, progress in (Hays). 1901. p. 217 .....	A1.10:901
Animal diseases. <i>See</i> Diseases of animals.	
Animal fibers. <i>See</i> Wool.	
Animal husbandry in central West (Morrow). 1882. p. 62 .....	A1.8:22
Animal industry:	
Administrative work of Federal Government in relation to (Thompson). 1899. p. 441 .....	A1.10:899
same, p. 102 .....	A4.1:899
Australasian; statistics of, 1899-1900. p. 557 .....	A4.1:900
Kansas, condition of (Heath). p. 405 .....	A4.1:889-90
Literature on, in publications of Agriculture Department, 1837-98, index to (Thompson). 1900 .....	A21.3:5
Pacific coast (Jones). 1892. p. 59 .....	A1.8:20
Porto Rico (Cook). p. 663 .....	A4.1:899
United States with especial reference to breeding of cattle, horses, etc. (Gaines). p. 122 .....	A1.7:2
Animal Industry Bureau, Agriculture Department:	A4.
Act for establishment of. p. 473 .....	A4.1:884
same, proposed amendments to .....	A1.2:An5 <sup>1</sup>
Bill injuriously affecting work of, with letter of protest and appeal of Assistant Secretary of Agriculture. 1896 .....	A1.4:4
Inspectors and other employees of, general instructions to. Mar. 16, 1899. p. 10 .....	A4.5:33 <sup>2</sup>
Letter of J. M. Rusk regarding. 1890 .....	A1.2:An5 <sup>2</sup>
Papers accompanying exhibit of, at Paris Exposition of 1889. p. 359 .....	A4.1:887-8 1
Publications of fiscal year 1897. p. 322 .....	A4.1:897
Rules and regulations—	
1895 .....	A4.3:9
1897. p. 324 .....	A4.1:897
1897 and 1898. p. 605 .....	A4.1:898
1899. p. 692 .....	A4.1:899
1900. p. 592 .....	A4.1:900
1901. p. 673 .....	A4.1:901
Work of, at Trans-Mississippi and International Exposition. p. 504 .....	A4.1:899
Work of, for farmer (Salmon). 1897. p. 236 .....	A1.10:897
same, reprinted. p. 25 .....	A4.1:897
Animal life, influence of climate on (Dean). 1902. p. 107 .....	A29.3:31
Animal parasites:	
Eleven miscellaneous papers on. 1902 .....	A4.3:35
Inspection of meats for. 1898 .....	A4.3:19
Notes on (Stiles and Hassall)—	
50-52. p. 558 .....	A4.1:899
55-57 .....	A4.4:34
58-62. 1902. p. 19 .....	A4.3:35
<i>See also</i> Chickens — Ducks — Geese — Parasites — Pigeons — Sheep — Turkeys.	
Animal products:	
Cape of Good Hope, exports and imports of. p. 529 .....	A4.1:899
South Africa (Stowe). p. 512 .....	A4.1:898
United States, number and value of, 1880-96 .....	A27.8:11
<i>See also</i> Hides — Meats.	



# Index

	Classification no.
Animal smallpox, note on. 1866. p. 56 .....	A27.9:4
Animal substances, nitrogenous compounds of, suggestions regarding nomenclature of (Atwater). 1899. p. 118 .....	A10.3:65
Animals:	
Cruelty to, prevention of, in D. C., bill relative to, etc. 1896 ....	A1.4:4
Dead, disposition of, in foreign cities. p. 346 .....	A4.1:899
Diseased, food products from (Salmon). p. 250 .....	A4.1:901
Diseases of. <i>See</i> Diseases of animals.	
Effect of naphthaline on (Taylor). 1883 .....	A18.2:N16
Excretion of metabolized nitrogen by (Langworthy). 1897. p. 817 .....	A10.6:7
Export trade in, 1889. p. 69 .....	A1.1:889
same, p. 22 .....	A4.1:889-90
same, p. 10 .....	A4.2:B39
Feeding moldy corn to (Langworthy). 1900. p. 26 .....	A1.9:722
Feeding of—	
abstracts of reports of Agricultural Experiment Stations on, 1889-1902 .....	A10.6:
experiments in, at Rothamsted Experiment Station, England, lecture on (Gilbert.) 1893. p. 231 .....	A10.3:22
use of condimental feeding stuffs in. 1898. p. 25 .....	A1.9:73
Feeding stuffs for, composition, etc. —	
1894. p. 558 .....	A1.10:894
1895. p. 560 .....	A1.10:895
1896. p. 605 .....	A1.10:896
Food for—	
cutting and cooking (Stewart). p. 396 .....	A1.1:865
peanut oil-cake as. 1873. p. 445 .....	A27.9:11
Free importation of. 1868. p. 62 .....	A27.9:6
Geographic distribution of, in North America (Merriam). p. 203 .....	A1.10:894
Humane treatment of, general order to inspectors .....	A1.2:In7 <sup>2</sup>
Imported, inspection and quarantine of. p. 85 .....	A1.1:890
same, p. 73 .....	A4.1:889-90
Imports of, at quarantine stations. 1897. p. 250 .....	A4.1:897
"Loco" plant and its effect on (Stalker). p. 271 .....	A4.1:886
Lower, pediculi and mallophaga affecting man and (Osborn). 1891. ....	A9.3:7
Movements of, from districts in which rabies exists, order concerning. 1899 .....	A4.5:48
Number of, to be used in feeding experiments (Gulley). 1891. p. 94 .....	A10.3:7
Physical conditions surrounding, in experimental feeding, especially as relative to stalls and mangers (Henry). 1891. p. 92. ....	A10.3:7
Quarantine of. <i>See</i> Cattle orders.	
Slaughtered for food, necessity for inspecting (Salmon). 1889. p. 30 .....	A7.3:25
Training, for work (Gardner). p. 355 .....	A1.1:866
Wheat as a food for growing and fattening (Salmon) .....	A4.4:2
<i>See also</i> Alpaca — Angora goats — Arvicolinæ — Bandicoots — Bats — Blarina — Breeding — Buffalo — Cashmere goat — Cattle — Diseases of cattle — Evotomys — Farm animals — Gophers — Grasshopper mouse — Ground squirrels — Guinea pigs — Hesperomys — Jack rabbits — Jumping mice — Kangaroo rats — Lemmings — Mammals — Merino ram — Musk ox — Pika — Pocket gophers — Pocket mice — Prairie dogs — Rabbits — Rats — Rocky Mountain goat — Shrews — Skunks — Squirrels — Voles — Weasels — Zebroids — Zoology — and headings beginning with Animal.	
Animals, domestic:	
Age of, determination by teeth. 1898. p. 667 .....	A1.10:898
Feeding standards for (Kühn). 1893. p. 6 .....	A10.6:4
Insects affecting (Osborn). 1896 .....	A9.6:5
Parasites of, methods of attacking (Osborn). 1893. p. 163 .....	A9.7:6
Temperature, pulse, and respiration of. 1900. p. 740 .....	A1.10:900
Upper air passages of, pathogenic and toxicogenic bacteria in (Moore). 1893. p. 38 .....	A4.3:3
<i>See also</i> Cattle — Dogs — Farm animals — Goats — Hogs — Horses — Lambs — Mules — Pigs — Sheep — Swine.	



	<b>Index</b>
	<b>Classification no.</b>
<b>Animals, noxious:</b>	
Danger of introducing (Palmer). 1898. p. 87.....	A1.10:898
Extermination of, by bounties (Palmer). 1896. p. 55.....	A1.10:896
Statistics of. 1888. p. 366.....	A27.9:26
<b>Animals, wild, which may be imported without permits. 1900.....</b>	<b>A5.4:30</b>
<b>Animals and animal products:</b>	
Exports of (Salmon). 1897.....	A4.4:17
Great Britain (May). 1898. p. 440.....	A4.1:898
same, 1899.....	A.4.1:899
Imports and exports of—	
1892-96. p. 305.....	A4.1:897
1898. p. 581.....	A4.1:898
1892-99 (Thompson). p. 421.....	A4.1:899
1900 (Thompson). p. 535.....	A4.1:900
1901 (Roberts). p. 611.....	A4.1:901
Malta (Grout). p. 520.....	A4.1:898
Trade of Porto Rico in. p. 405.....	A4.1:899
<b>Ankle diseases of horses (Holcombe). p. 357.....</b>	<b>A4.2:H78</b>
<b>Antarctic, fresh light on (Abbe). 1902. p. 31.....</b>	<b>A29.6:30</b>
<b>Anthomyia angustifrons, a lignivorous insect. 1886. p. 38.....</b>	<b>A9.3:12</b>
<b>Anthracite coal, production of, in Pennsylvania. 1820-72. p. 36...</b>	<b>A27.9:11</b>
<b>Anthracnose. See Cotton — Grape.</b>	
<b>Anthrax or charbon:</b>	
California cattle (Bowhill). p. 443.....	A4.1:887-8
same, further investigation (Chandler). p. 450.....	A4.1:887-8
Cattle in the Northwest (McLean). 1881. p. 311.....	A1.6:34
same (Detmers). 1881. p. 312.....	A1.6:34
Delaware, combating in (Neale). p. 190.....	A4.1:897
Dreaded diseases, one of the most. p. 23.....	A1.9:79
Etiology of. p. 298.....	A1.6:34
Inoculation of. p. 209.....	A1.6:22
Louisiana, outbreak in, 1896 (McQueen). p. 176.....	A4.1:897
Lower Mississippi Valley, outbreak in. p. 166.....	A4.1:897
New Jersey cattle (Hunt). p. 359.....	A1.1:881-2
same (Law). 1881. p. 312.....	A1.6:34
New Mexico, outbreak of (McLean). 1881. p. 317.....	A1.6:34
New York cattle (Law). 1881. p. 312.....	A1.6:34
Parasitic on cutworms. 1890. p. 353.....	A9.7:2
Prevalence of, among domesticated animals (Norgaard). p. 40..	A4.1:893-4
Western Mississippi outbreak. p. 379.....	A4.1:889-90
<b>Antigua, W. I.:</b>	
Climate of, seasonal variations in, 1890-1900 (Kimball). p. 168..	A29.6:29
Climatology of (Alexander). 1901. p. 165.....	A29.6:29
Thunderstorms at (Alexander). 1900. p. 380.....	A29.6:28
<b>Antisell, Thomas:</b>	
Cinchona, cultivation of, in United States. p. 454.....	A1.1:866
Sewage deposit, value of, of city of Washington. 1869. p. 228..	A27.9:7
<i>See also</i> , for reports as Chemist, Chemistry Bureau, Agriculture Department, 1866-1870.....	A7.1:
<b>Antitoxic serum, treatment of experimental tuberculosis with (De     Schweinitz). p. 305.....</b>	<b>A4.1:898</b>
<b>Ants. See House ants.</b>	
<b>Apetalæ of western Texas, description of (Coulter). 1894. p. 347..</b>	<b>A6.5:2</b>
<b>Aphelenchus olesistus, a nematoid worm, cause of leaf sickness in     Begonia and Asplenium (Bos). 1893. p. 161.....</b>	<b>A9.7:6</b>
<b>Aphelininæ of North America, a subfamily of hymenopterous para-     sites of family Chalcididæ, revision of (Howard). 1895.....</b>	<b>A9.8:1</b>
<b>Aphelinus fuscipennis, an important parasite upon San José scale in     eastern United States (Johnson). 1900. p. 73.....</b>	<b>A9.6:26</b>
<b>Aphididæ:</b>	
Certain little known, fifth contribution to a knowledge of (Weed). 1891. p. 285.....	A9.7:3
Notes on (Osborn and Serrine). 1893. p. 235.....	A9.7:5
Some questions relating to (Smith). 1891. p. 226.....	A9.7:3
<b>Aphis:</b>	
Apple, pear, and quince (Sanderson). 1902. p. 123.....	A10.3:115

# Index

	Classification no.
<b>Aphis—Continued</b>	
Corn-root, summary history of (Forbes). 1891. p. 233.....	A9.7:3
New species of, injurious to plums and peaches in Georgia, preliminary note on (Scott). 1902. p. 56.....	A9.6:31
See also Woolly aphis.	
Aphthæ, epizootic, of stock, nature, causes, treatment, etc., of. p. 352.....	A1.1:870
See also Foot-and-mouth disease.	
Apthous fever. See Foot-and-mouth disease of cattle.	
Apiarian exhibit at Columbian Exposition (Benton). 1894. p. 242.	A9.7:6
<b>Apiculture:</b>	
Experiments in—	
1885 (McLain). p. 333.....	A1.1:885
1886 (McLain). p. 583.....	A1.1:886
1887 (McLain). p. 66.....	A9.3:13
1887. p. 170.....	A1.1:887
1891 (Cook). p. 83.....	A9.3:26
1892 (Larrabee). p. 57.....	A9.3:30
Manual of instruction in (The Honey Bee) (Benton).....	A9.6:1
See also Bees.	
Apoplectiform septicemia. See Chickens.	
Appalachian forests, southern, by river basins, description of (Ayres and Ashe). p. 69.....	A1.2:Ap4 <sup>2</sup>
Appalachian mountain region, southern, forests and forest conditions of (Wilson). p. 13.....	A1.2:Ap4 <sup>2</sup>
Appalachian region, southern, forests, rivers, and mountains of, message from President of U. S., transmitting report of Secretary of Agriculture (Roosevelt).....	A1.2:Ap4 <sup>2</sup>
<b>Appalachians, southern:</b>	
Area of heavy rainfall in (Hawkins). 1897. p. 442.....	A29.6:25
Climate of (Henry). p. 143.....	A1.2:Ap4 <sup>2</sup>
Forest reserve in, proposed, present status of movement for, memorials, reports, and extracts from press. p. 155.....	A1.2:Ap4 <sup>2</sup>
Forests and forest conditions in (Ayres and Ashe). p. 45.....	A1.2:Ap4 <sup>2</sup>
Hydrography of (Pressey and Myers). p. 123.....	A1.2:Ap4 <sup>2</sup>
Lumbering in, now and under Government ownership and supervision (Price). p. 61.....	A1.2:Ap4 <sup>2</sup>
Practical forestry in (Price). 1900. p. 357.....	A1.10:900
Topography and geology of (Keith). p. 111.....	A1.2:Ap4 <sup>2</sup>
Trees of (Ashe and Ayres). p. 93.....	A1.2:Ap4 <sup>2</sup>
Apparatus for sale by Agriculture Department. Jan. 24, 1896.....	A1.2:Ap4 <sup>1</sup>
Apple and how to grow it (Brackett). 1900.....	A1.9:113
<b>Apple scab:</b>	
Remedies for, experiments with (Taft). p. 30.....	A6.3:11
Treatment of, experiments—	
1889 (Goff). p. 33.....	A28.5:5
1889 (Galloway and Southworth). p. 210.....	A28.5:5
1890 (Goff). p. 22.....	A6.3:11
1891 (Goff). p. 19.....	A28.5:6
1893 (Goff). p. 87.....	A10.3:16
Apple-tree borers, larger, circular relating to (Chittenden).....	A9.5:32
Apple-tree weevil, bronze (Chittenden). 1900. p. 37.....	A9.6:22
Apple trees, grafting, opinions of nurserymen and apple growers regarding. 1898. p. 12.....	A1.9:79
Apple-twigg insect borer (Glover). 1873. p. 29.....	A27.9:11
<b>Apples:</b>	
Analyses of (Richards). p. 350.....	A1.1:886
Aphids of (Sanderson). 1902. p. 123.....	A10.3:115
Bitter rot of, treatment of (Curtiss). 1890. p. 38.....	A6.3:11
Commercial orcharding (Brackett). 1901. p. 593.....	A1.10:901
Description of leading popular varieties. p. 163.....	A1.1:862
same (Elliott). p. 19.....	A1.1:863
Evaporated, zinc in (Wiley). 1896.....	A7.3:48
For Southern States. p. 184.....	A1.1:869
Keeping qualities of (Clark). 1900. p. 16.....	A1.9:119
Leptocoris trivittata injuring, note on. 1886. p. 41.....	A9.3:12

<b>Apples—Continued</b>	
Low-grade, use of, by evaporation and manufacture of cider. 1898. p. 20 .....	A1.9:73
Powdery mildew of, experiments in treatment. 1889 .....	A28.4:8
same (Galloway). 1891. p. 11 .....	A28.5:6
Ripe rot of (Southworth). 1891. p. 164 .....	A28.5:8
Storing, without ice (Clark). 1900. p. 5 .....	A1.9:119
Ten varieties of, suitable for export trade (Taylor). 1898. p. 350. ....	A20.3:7
<i>See also</i> Dried apples—Woolly aphis.	
Appleyard, T. J. Address of, before National Road Conference, July, 1894. p. 41 .....	A22.3:10
Applied science as factor of rural production. 1885. p. 31. No. 20. ....	A27.9:23
<b>Appointment clerk, Agriculture Department:</b>	
Report of—	
1895 (Bennett). p. 265 .....	A1.1:896
1896 (Bennett). p. 267 .....	A1.1:896
1897 (Bennett). p. 225 .....	A1.1:897
1902 (Bennett). p. 383 .....	A1.1:902
Reports of .....	A1.2:Ap81
Apprentice system, manual training and (Richards). 1894. p. 73..	A10.3:20
Appropriations, annual, use of, decision of Comptroller of Treasury, Apr. 18, 1900 .....	A2.2:Ap6
Apricots, food value of (Langworthy). 1899. p. 22 .....	A1.9:105
<b>April:</b>	
No changes in climate of (Abbe). 1899. p. 158 .....	A29.6:27
Weather condition for, statement of average (Garriott). p. 162..	A29.6:29
Aquaria, fresh and salt water (West). p. 446 .....	A1.1:864
Aquatic bug, interesting, report of. 1891. p. 198 .....	A9.7:4
<b>Aqueous vapor:</b>	
Relative qualities of, in atmosphere, determination of, by means of absorption lines of the spectrum. 1896 .....	A29.3:16
Total quantity of, in atmosphere. 1894. p. 539 .....	A29.6:22
Aquilar y Santillan, Rafael. Meteorology in Mexico, brief sketch of development of. 1895. p. 335 .....	A29.3:11 <sup>2</sup>
Arabia, wool trade of. p. 607 .....	A4.1:901
<b>Arable soils. <i>See</i> Soils.</b>	
<b>Arbor day:</b>	
History and observance (Egleston). 1896 .....	A1.8:56
Observance of, by schools (Northrop). p. 27 .....	A1.8:56
Origin and growth (Morton). 1887. p. 22 .....	A1.8:56
Relation of, to agriculture and horticulture (Skinner). p. 34....	A1.8:56
Value and uses of (Mull). p. 29 .....	A1.8:56
<i>See also</i> Forestry.	
Arbor day for the commonwealth (Higbee). p. 28 .....	A1.8:56
Arbor day planting in Eastern States .....	A13.4:5
Arborescent flora of U. S., nomenclature of (Sudworth). 1897 .....	A13.3:14
<b>Archibald, E. Douglas:</b>	
Droughts, famines, and forecasts in India. 1900. p. 246 .....	A29.6:28
Report of, on kites, note on (Abbe). 1897. p. 164 .....	A29.6:25
<b>Arctic and antarctic meteorological observers, notes on (Abbe).</b>	
1901. p. 558 .....	A29.6:28
<b>Argentina:</b>	
As a market for pure-bred cattle from U. S. (Salmon). 1902 ....	A4.4:37
Cattle and cattle products of, some statistics of, 1899. p. 515 ....	A4.1:899
Crops of. 1887. p. 382 .....	A27.9:25
Great Britain's purchases of cavalry horses in (Buchanan). 1898. p. 22 .....	A1.2:1178
Live-stock shipments from, to England. p. 77 .....	A4.1:895-6
same (Wray). p. 81 .....	A4.1:895-6
Meteorology in (Abbe). 1902. p. 315 .....	A29.6:30
Statistics of. 1890. p. 402 .....	A27.9:28
Wheat production and exportation in, course of, 1880-1896 .....	A12.4:10
<i>See also</i> Buenos Ayres—Cordova.	
Argyresthia, notes on, with descriptions of new species (Walsingham). 1890. p. 117 .....	A9.7:3
<b>Arid lands. <i>See</i> Desert lands.</b>	

# Index

	Classification no.
<b>Arid regions:</b>	
<b>Colorado—</b>	
grasses of, investigation of (Vasey). 1886.....	A6.3:1
possibilities of reclamation of, by utilizing underlying waters (Miller). 1891. pt. 1, p. 301 .....	A15.2:Ir7 <sup>2</sup>
<b>Kansas—</b>	
grasses of, investigation of (Vasey). 1886.....	A6.3:1
possibilities of reclamation of, by utilizing underlying waters (Miller). 1891. pt. 1, p. 301 .....	A15.2:Ir7 <sup>2</sup>
Lakes and climate in, oscillations of (Abbe). 1900. p. 544 .....	A29.6:28
Pacific slope, climatic and agricultural features of, etc. (Hilgard and others). 1882.....	A1.8:20
Some climatic features of (Moore). 1896.....	A29.2:Ar4
Waterworks east of, having supply from artesian and underflow sources. 1891. pt. 1, p. 433 .....	A15.2:Ir7 <sup>2</sup>
<i>See also</i> Destitute regions—Semiarid regions.	
Aristida purpurea nutt., and its allies (Merrill). 1901.....	A3.4:34
<b>Arizona:</b>	
Aerolite in, fall of (Abbe). 1897. p. 56 .....	A29.6:25
Agricultural features of (Furnas), 1892. p. 173.....	A1.8:20
Agricultural notes on, 1866. p. 442.....	A27.9:4
Atmosphere in, clearness of, notes on (Abbe). 1899. p. 110.....	A29.6:27
Birds observed in parts of, by Death Valley Expedition of 1891, notes on (Fisher). 1893. p. 7 .....	A5.5:7
Central desert region from, to western Texas, characteristic vege- tation of (Dewey). p. 351 .....	A1.1:891
same, p. 351 .....	A6.1:891
Climate of, ancient (Abbe). 1897. p. 353.....	A29.6:25
Climatic and agricultural features (Hilgard and others). 1882....	A1.8:20
Entomological notes from (Cockerell). 1902. p. 107.....	A9.6:37
Forage plants of (Pool). 1888. p. 48.....	A6.3:6
Fruits of, tropical and semitropical (Klee). 1891. p. 111.....	A20.3:1
Grasses of (Merrill). 1901 .....	A3.4:32
Grasses of arid districts of, investigation of (Tracy). 1888. p. 5..	A6.3:6
Grasses of desert region of, plates and descriptions of (Vasey). 1890 .....	A6.2:N82 <sup>1</sup>
same.....	A6.3:12
Irrigation in, use of water in (Code). 1900. p. 111.....	A10.3:86
<i>See also</i> Arizona Experiment Station farm.	
Locusts, injurious and other (Townsend). 1893. p. 28.....	A9.7:6
<b>Northwestern—</b>	
cactuses, yuccas, and agave in deserts and desert ranges of, geographic and vertical distribution (Merriam). 1893. p. 345 .....	A5.5:7
spermophile, new, from, description of (Merriam). 1893. p. 17.	A5.5:2
trees and shrubs in deserts and desert ranges of, distribution of (Merriam). 1893. p. 285 .....	A5.5:7
Plants collected by Edward Palmer in, 1890, list of (Rose). 1891. p. 91 .....	A6.5:1
Range improvement in (Griffiths). 1901.....	A19.3:4
Sheep husbandry in. 1891. p. 20.....	A27.9:29
Sunstroke in (Phillips). 1896. p. 454.....	A29.6:24
<i>See also</i> Flagstaff—Little Colorado River, Desert of—Lower Colo- rado River—Phoenix—San Francisco Mountain region— Salt River Valley.	
Arizona and Japan, winds of (Abbe). 1895. p. 255.....	A29.6:23
Arizona Experiment Station farm, irrigation at, 1901 (McClatchie). p. 125.....	A10.3:104
same, 1902 (McClatchie). p. 87 .....	A10.3:119
Arkalon, Kansas, sorghum sugar experiments at, 1889 (Wiley) .....	A7.3:26
<b>Arkansas:</b>	
Cotton in. 1866. p. 330.....	A27.9:4
Farm resources and products of. 1868. p. 88.....	A27.9:6
Insects, injurious and other, observations on (Webster). 1891. p. 451.....	A9.7:3
Moving cattle into Missouri from two northern tiers of counties in, Mar. 8, 1899.....	A4.5:32

	<b>Index</b>
	<b>Classification no.</b>
Arkansas—Continued	
Road-making materials in (Branner). 1894.....	A22.3:4
Southwestern, climate of, 1840-67. p. 429.....	A27.9:8
Tornadoes in (Emery). 1900. p. 499.....	A29.6:28
<i>See also</i> Fort Smith — Pine Bluff.	
Arkansas Experiment Station, Fayetteville, laboratory notes from.	
1890. p. 134.....	A7.3:24
Arkansas Valley, Colorado, irrigation in (Stover). 1902. p. 287...	A10.3:119
Arkansas Valley, upper, description of. 1870. p. 150.....	A27.9:8
Armour, Philip Danforth. Utilization of packing-house offal.	
1900. p. 514.....	A4.1:900
Armsby, Henry Prentiss:	
Address as president of Association of American Agricultural Col- leges and Experiment Stations, at 13th annual convention.	
1900. p. 21.....	A10.3:76
Agricultural experiment stations, collective exhibit at Paris Expo- sition, report of committee on—	
1899, p. 30.....	A10.3:65
1900, p. 20.....	A10.3:76
1901, p. 23.....	A10.3:99
Agricultural experiment stations, cooperative exhibit at World's Columbian Exposition, 1893, report of committee on—	
1892, p. 24.....	A10.3:7
1893, p. 99.....	A10.3:16
1894, p. 34.....	A10.3:20
Digestion experiment—	
is a digestion experiment fallacious? 1891. p. 89.....	A10.5:3
recent work abroad. 1891. p. 132.....	A10.5:3
<i>See also</i> , as joint author, Wheeler Homer Jay.	
Army horses, German, requirements for (Kuhn). 1898. p. 31.....	A1.2:H78
Army Medical Department, connection of, with development of meteorology in U. S. (Smart). 1895. p. 207.....	A29.3:11*
Army worm:	
Bibliography of. 1883. p. 148.....	A8.1:3
Circular relative to (Howard). 1894.....	A9.5:4
Entomological Commission, report on. 1883. p. 89.....	A8.1:3
Fall, report on (Chittenden). 1901.....	A9.6:29
Invasion of New Jersey in 1880, account of (Lockwood). p. 101.	A1.1:881,882
same, p. 101.....	A9.1:882
same, p. 139.....	A8.1:3
Notes on (Glover). 1872. p. 438.....	A27.9:10
same (Glover). 1873. p. 30.....	A27.9:11
same. 1883. p. 9.....	A9.3:3
same (Webster). 1890. p. 112.....	A9.7:3
Occurrence of, during season of 1885-86. p. 42.....	A9.3:12
Outbreak of, and some other insects affecting grain in Maryland (Ashmead). 1890. p. 53.....	A9.7:3
Arnheim, Netherlands, exhibition of agricultural implements at.	
1870. p. 154.....	A27.9:8
Aroid plant, insect fertilization of an (Hubbard). 1895. p. 340...	A9.7:7
Aroostook County, Maine, farming in. 1869. p. 149.....	A27.9:8
Arrhenius, J. <i>See</i> , as translator, Alsike clover.	
Arsenate of lead:	
Improvement in manufacture of (Kirkland). 1899. p. 102.....	A9.6:20
Preparation and use of (Kirkland). 1897. p. 46.....	A9.6:9
Arsenic, soluble, in arsenical insecticides (Haywood). 1902. p. 51.	A9.6:37
Arsenical insecticides:	
Report on (Haywood). 1902. p. 96.....	A7.3:67
Soluble arsenic in (Haywood). 1902. p. 51.....	A9.6:37
<i>See also</i> Arsenites.	
Arsenical poisons for plum and peach curculio (Forbes). 1889. p. 3.	A9.7:2
Arsenical spraying of fruit trees while in blossom (Lintner). 1893.	
p. 181.....	A9.7:6
Arsenicals, new and old, comparative tests with, on foliage and with larvæ (Marlatt). 1896. p. 30.....	A9.6:6
Arsenites:	
Some historic notes on (Cook). 1891. p. 62.....	A9.7:4

# Index

	Classification no.
<b>Arsenites—Continued</b>	
Spraying with, vs. bees (Webster). 1892. p. 121 .....	A9.7:5
same. 1894. p. 132 .....	A9.7:7
<b>Arsenites and arsenical mixtures as insecticides (Gillette). 1893.</b>	
p. 115 .....	A9.7:6
<b>Art, science versus (Roberts). 1898. p. 69 .....</b>	A10.3:49
<b>Artace punctistriga, some observations upon (Morgan). 1901. p.</b>	
182 .....	A10.3:99
<b>Artesian and underflow investigation:</b>	
Between ninety-seventh degree of west longitude and foothills	
of Rocky Mountains (Nettleton). 1891 .....	A15.2:P94 <sup>2</sup>
Final geological reports (Hay). 1893. pt. 3 .....	A15.2:Ir7 <sup>2</sup>
Final report of chief engineer (Nettleton). 1893. pt. 2 .....	A15.2:Ir7 <sup>2</sup>
Progress report (Hay). 1891. p. 137 .....	A15.2:P94 <sup>1</sup>
Progress report on central division of Great Plains (Gregory).	
1891. p. 145 .....	A15.2:P94 <sup>1</sup>
South Dakota (Coffin). 1893. pt. 4, p. 51 .....	A15.2:Ir7 <sup>2</sup>
<i>See also Irrigation.</i>	
<b>Artesian and underflow investigations and irrigation inquiry, reports</b>	
of special agent in charge .....	A15.1:
<b>Artesian and underground waters in Texas, eastern New Mexico, and</b>	
Indian Territory, west of ninety-seventh meridian (Hill).	
1893. pt. 3, p. 41 .....	A15.2:Ir7 <sup>2</sup>
<b>Artesian basins in eastern Colorado and New Mexico, geological</b>	
conditions of (Van Diest). 1890. p. 87 .....	A15.2:Ar7
<b>Artesian water in Nevada (Irish). 1891. p. 199 .....</b>	A15.2:P94 <sup>1</sup>
<b>Artesian waters, existence of, west of ninety-seventh meridian, etc.</b>	
(Dumble). 1890. p. 99 .....	A15.2:Ar7
<b>Artesian well investigations:</b>	
Colorado field work (Carpenter). 1890. p. 173 .....	A15.2:Ar7
Field agents' report for middle division (Gregory). 1890. p. 145.	A15.2:Ar7
Field work in (Nettleton). 1890. p. 31 .....	A15.2:Ar7
Geologist's report (Hall). 1890. p. 37 .....	A15.2:Ar7
Location of, within area of ninety-seventh meridian and east	
of foothills of Rocky Mountains, to determine (Hinton and	
others) .....	A15.2:Ar7
New Mexico field work (Carpenter). 1890. p. 233 .....	A15.2:Ar7
North and South Dakota field work (Culver). 1890. p. 55 .....	A15.2:Ar7
North Dakota field work (Underhill). 1890. p. 105 .....	A15.2:Ar7
South Dakota field work (Coffin). 1890. p. 125 .....	A15.2:Ar7
same (Updyke). 1890. p. 110 .....	A15.2:Ar7
Special expert's report (Beach). 1890. p. 141 .....	A15.2:Ar7
Texas field work (Roesler). 1890. p. 243 .....	A15.2:Ar7
<b>Artesian well near Fort Lyon, Colo. (White and Aughey). p. 26...</b>	A1.1:881-2
<b>Artesian wells:</b>	
Irrigation by, in Algiers. 1891. pt. 1, p. 369 .....	A15.2:Ir7 <sup>2</sup>
Upon great plains; report of Geological Commission (White and	
Aughey). 1882 .....	A1.8:19
<b>Arthur, J. C., pear blight. p. 125 .....</b>	A1.1:886
Same, p. 125 .....	A28.1:886
<b>Artichokes. <i>See</i> Bur artichokes — Jerusalem artichokes.</b>	
<b>Arts. <i>See</i> Industries and arts.</b>	
<b>Arvicolinae, description of new genus (Phenacomys) and four new</b>	
species of (Merriam). 1889. p. 27 .....	A5.5:2
<b>Asbury Park, N. J., National good road conference, July 5, 6, 1894..</b>	A22.4:9
Same, proceedings of. 1894 .....	A22.3:10
<b>Aschaffenburg, Bavaria, Royal Forest School at. 1885. p. 50 .....</b>	A1.8:36
<b>Ash, committee on, report of, at Association of Official Agricultural</b>	
Chemists. 1900. p. 94 .....	A7.3:62
Same. 1901. p. 54 .....	A7.3:67
<b>Ash:</b>	
Composition of, of wheat grain and wheat straw grown at Rotham-	
sted in different seasons and by different manures (Lawes	
and Gilbert). p. 85 .....	A7.3:4
Estimation and importance to agricultural chemistry and agri-	
culture of ash constituents of plants (Tollens). 1902. pp. 207,	
305 .....	A10.6:13



		<b>Index</b>
		(Classification no.)
<b>Ash—Continued</b>		
Loss of sulphur in preparing (Fraps). 1901. p. 98 .....		A7.3:62
<i>See also</i> Ashes—Soils and ash.		
<b>Ashburner, Charles E., jr.:</b>		
Highways, their construction and maintenance. 1895. p. 32 ...		A22.3:11
Macadamized roads, report on. 1895. p. 31 .....		A22.3:17
<b>Ashby, Newton B.:</b>		
Bristol butter markets. p. 210 .....		A4.1:899
Cheese, market for, in England. p. 214 .....		A4.1:899
Hamburg butter and cheese markets. p. 223 .....		A4.1:899
Hamburg trade in eggs. p. 345 .....		A4.1:899
London butter trade. p. 211 .....		A4.1:899
Manchester butter market. p. 201 .....		A4.1:899
Paris butter and cheese markets. p. 220 .....		A4.1:899
Paris market for eggs. p. 336 .....		A4.1:899
Poultry dressed in foreign cities. p. 330 .....		A4.1:899
Poultry markets of Paris. p. 341 .....		A4.1:899
<i>See also</i> , as translator, Scelle, Ch.		
Ashcraft, Charles E., jr. Lightning from a cloudless sky. 1900. p. 489 .....		A29.6:28
<b>Ashe, W. W. <i>See</i>, as joint author, Ayres, Horace B.</b>		
Ashe, W. W., and Ayres, Horace B. Trees of Southern Appa- lachians. p. 93 .....		A1.2:Ap4 <sup>2</sup>
<b>Ashes:</b>		
Are they an economical fertilizer at present prices? 1897. p. 24.		A1.9:65
Coal, as a fertilizer. 1868. p. 461 .....		A27.9:6
Supply of, for agricultural purposes (Fleischman). 1884. No. 9. p. 28 .....		A27.9:22
<i>See also</i> Ash.		
<b>Asheville, N. C. <i>See</i> Shelton Tobacco-Curing Co.</b>		
<b>Ashley, Alexander McC.:</b>		
Seasonal forecasts, long range, for Pacific Coast States. 1901. p. 16 .....		A29.6:29
Short biography of (Abbe). 1901. p. 173 .....		A29.6:29
<b>Ashmead, William Harris:</b>		
Army worm and some other insects affecting grain in Maryland, outbreak of. 1890. p. 53 .....		A9.7:3
Cotton insects found in Mississippi. 1894. pp. 25, 240, 320 .....		A9.7:7
Encyrtid with six-branched antennæ. 1891. p. 455 .....		A9.7:3
Insects injurious to garden crops in Florida. 1887. p. 9 .....		A9.3:14
Spider parasite, new. 1894. p. 259 .....		A9.7:6
<b>Ashton, A. J. <i>See</i>, for report as chief of Seed Division, Agricultural Department. 1896 .....</b>		
		A24.1:
<b>Asia:</b>		
Climatology of southern and western (Dallas). 1896. p. 672....		A29.3:11 <sup>3</sup>
Eastern, United States wheat for. 1897 .....		A12.4:17
Fruits, American and East Asian, sketch of relationship between (Bailey). 1894. p. 437 .....		A1.10:894
Magnetic survey of (Tillo). 1895. p. 465 .....		A29.3:11 <sup>2</sup>
Asia Minor, angora goat industry of (Bailey). p. 493 .....		A4.1:901
<b>Asiatic ladybird, importation and present status of, preliminary re- port on (Marlatt). 1902. p. 70 .....</b>		
		A9.6:37
<b>Asopia costalis, clover hay-worm, some studies of (Webster). 1891. p. 121 .....</b>		
		A9.7:4
<b>Asparagus:</b>		
Culture of (Handy). 1897 .....		A1.9:61
Forcing in the field, method of. 1898. p. 6 .....		A1.9:84
Insects that affect (Chittenden). 1898. p. 54 .....		A9.6:10
Pest of, little-known (Sirrine). 1901. p. 177 .....		A10.3:99
Power sprayer for (Sirrine). 1901. p. 177 .....		A10.3:99
Asparagus beetles (Chittenden). 1896. p. 341 .....		A1.10:896
Asparagus berries, black spots of (Fairman). 1889. p. 157 .....		A28.5:5
Aspidiotus ostreæformis, account of (Marlatt). 1899. p. 76 .....		A9.6:20
<b>Asplenium. <i>See</i> Aphelenchus olesistus.</b>		
<b>Asplenium, leaf sickness in, aphelenchus olesistus cause of (Bos). 1893. p. 161 .....</b>		
		A9.7:6
Assmann, R. Balloon ascensions of, Nov. 14, 1896. p. 457 .....		A29.6:24



# Index

Classification no.

Associations. <i>See</i> Names of associations.	
Asthenia (going light) in fowls (Dawson). p. 329 .....	A4.1:898
Astronomy for meteorologist, note on (Abbe). 1898. p. 562.....	A29.6:26
Astronomy. <i>See</i> Aurora — Hevelius — Leonids at Havre, Mont.— Lunar rainbow — Meteor — Moon — Parhelion — Stars — Sun.	
Astrophysical Observatory of Smithsonian Institution, annals of (Langley). 1902. p. 258 .....	A29.6:30
Athens, climate of, notes on (Abbe). 1898. p. 554 .....	A29.6:26
Atherton, George Washington:	
Address of, as president of Association of American Agricultural Colleges and Experiment Stations at second annual conven- tion Jan., 1889. p. 73.....	A10.5:1
same, at third annual convention, Nov., 1889. p. 65.....	A10.5:2
Land-grant colleges, military instruction in, report of committee on. 1901. p. 85 .....	A10.3:99
Morrill, Justin S., legislative career of. 1901. p. 60 .....	A10.3:99
Atkinson, Edward:	
Cooking of food, suggestions regarding. 1894.....	A1.8:54
Egyptian cotton, letter on. 1866. p. 417 .....	A27.9:4
Food laboratories in connection with agricultural experiment stations of U. S., suggestions for establishment of. 1893...	A10.3:17
Atkinson, George Francis:	
Anthracnose of cotton. 1891. p. 173 .....	A28.5:6
Cotton, diseases of. 1896. p. 279 .....	A10.3:33
Cotton cut-worm, note on. 1891. p. 31.....	A9.7:4
Nematode leaf disease, note on. 1891. p. 31.....	A9.7:4
Root rot, new disease of cotton. 1891. p. 262 .....	A9.7:3
Atkinson, George W. Road improvement in West Virginia, extract from governor's message. p. 14 .....	A22.4:33
Atkinson, V. T.:	
Cattle, bones of, diseases and accidents to. 1892. p. 281.....	A4.2:C29 <sup>1</sup>
Poisons and poisoning of cattle. 1892. p. 63 .....	A4.2:C29 <sup>1</sup>
Atlanta, Ga., comparative rain gage readings at (Henry). 1899. p. 543.....	A29.6:27
Atlanta, Ga., Cotton Convention, 1881:	
Address before, relative to cotton worm (Riley). p. 153.....	A1.1:881-2
same, p. 153.....	A9.1:882
Proceedings of.....	A1.8:17
Atlanta, Ga., Cotton States and International Exposition, 1895:	
Organization of Dept. and list of its exhibits at. 1895.....	A21.2:At6
Work of Agriculture Dept. illustrated at (Wait). 1895. p. 503..	A1.10:895
Atlanta, Ga., National Road Parliament, Oct. 17-19, 1895, reports by delegates to .....	A22.3:19
Atlanta, Ga., Southern Interstate Fair, cattle exhibited at, order re- garding. Aug. 20, 1900 .....	A4.5:70
Atlantic, north:	
Meteorology, monthly notes on, Jan., 1894-June, 1895.....	A29.6:
Storms, monthly notes on, July, 1891-Dec., 1893.....	A29.6:
Atlantic and Gulf coasts. Are present [storm] warnings and displays by flag and lantern best that can be devised for? (Smith). 1899. p. 27 .....	A29.3:24
Same (McAdie). 1899. p. 29 .....	A29.3:24
Atlantic City, N. J. Weather Bureau at, electric signal apparatus at (Brand). 1898. p. 405.....	A29.6:26
Atlantic Ocean, storms of, tropical, in September, 1895 (Garriott). p. 167.....	A29.6:23
Atlantic States, mineral fertilizers of. p. 367.....	A1.1:868
<i>See also</i> States and Territories.	
Atlas, climatological, of Russian Empire (Abbe). 1900. p. 343.....	A29.6:28
Atmidometry, some experiments in (Stevens). 1902. p. 129.....	A29.6:30
Atmosphere:	
Aqueous vapor in—	
relative quantities of, determination of, by means of absorp- tion lines of spectrum (Jewell). 1896.....	A29.3:16
total quantity. 1894 (Abbe). p. 539.....	A29.6:22
Carbonic acid gas in (Abbe). 1895. p. 300.....	A29.6:23

<b>Atmosphere—Continued</b>	
Circulation of, in tropical and equatorial regions (Rotch). 1902. p. 181.....	A29.6:30
Circulatory movements in, dynamic principle of (Bjerknaes). 1900. pp. 434, 532.....	A29.6:28
Clearness of, in Arizona (Abbe). 1899. p. 110.....	A29.6:27
Dust in (Abbe). 1899. p. 63.....	A29.6:27
Electric waves in (Abbe). 1897. p. 352.....	A29.6:25
Ether and (Abbe). 1899. p. 362.....	A29.6:27
Flux and reflux of (De Lamanon). 1898. p. 463.....	A29.6:26
Gas in, new (Abbe). 1898. p. 217.....	A29.6:26
General circulation of (Abbe). 1895. p. 458.....	A29.6:23
same, especially in Arctic regions (Kimball). 1901. p. 408.....	A29.6:29
same, original memoirs on (Brillouin). 1902. p. 300.....	A29.6:29
(Humidity in—	
charts of, notes on (Abbe). 1901. p. 118.....	A29.6:29
observations on (Lippincott). p. 520.....	A1.1:865
Hydrodynamic equations for, note on (Abbe). 1897. p. 445.....	A29.6:25
Line integrals in (Bigelow). 1900. p. 535.....	A29.6:28
Movement of, new method of observing direction of (Clough). 1898. p. 250.....	A29.6:26
Planetary, permanency of, according to kinetic theory of gases (Cook). 1902. p. 401.....	A29.6:30
Statics and kinematics of, studies on, in U. S. (Bigelow). 1902. pp. 13, 80, 117, 163, 250, 304, 347.....	A29.6:30
Studies on, at Trappes, France (Teisserenc de Bort). 1901. p. 20.....	A29.6:29
Systematic exploration of, by means of kites, method for (Rotch). 1902. p. 66.....	A29.3:31
Temperature of, average (Abbe). 1898. p. 415.....	A29.6:27
Tides in, notes on (Abbe). 1900. p. 109.....	A29.6:28
Upper, study of—	
by means of balloons (Kremser). 1896. p. 725.....	A29.3:11 <sup>3</sup>
by means of cloud observations (Vettin). 1896. p. 758.....	A29.3:11 <sup>3</sup>
from observations on mountain stations (Hann). 1896. p. 754.....	A29.3:11 <sup>3</sup>
Weight or mass of, notes on (Abbe). 1899. p. 58.....	A29.6:27
<i>See also</i> Air—Aqueous vapor—Autumn haze—Barogram—Barograph—Meteorology—and headings beginning Atmospheric.	
<b>Atmospheric absorption. See</b> Angstrom, Knut.	
Atmospheric air, ionisation of, report on (Wilson). 1901. p. 159..	A29.6:29
Atmospheric changes, relation of, to changes of water level in St. Marys Falls canal. 1894.....	A29.2:Sa2
<b>Atmospheric circulation:</b>	
In tropical cyclones, as shown by movements of clouds (Boyer). 1896.....	A29.2:At6 <sup>1</sup>
Laws of, notes on (Abbe). 1900. p. 250.....	A29.6:28
Atmospheric disturbances, local (Henry). 1898. p. 539.....	A29.6:26
<b>Atmospheric dust. See</b> Dust.	
<b>Atmospheric electricity:</b>	
Brillouin's theory (Abbe). 1897. p. 446.....	A29.6:25
Early experiments in (West). 1896. p. 333.....	A29.6:24
Methods and instruments of precision for study of (Chauveau). 1895. p. 569.....	A29.3:11 <sup>3</sup>
Monthly notes on, July, 1891–Oct., 1902.....	A12.6:
Origin, variations, and perturbations (Brillouin) 1897. p. 440...	A29.6:25
Origin of, notes on (Abbe). 1898. p. 259.....	A29.6:26
Reports on.....	A29.6:
Review of recent investigations into subject of (Elster and Geitel). 1895. p. 510.....	A29.3:11 <sup>3</sup>
Some experiments in (McAdie). 1891. p. 171.....	A29.6:19
Atmospheric moisture, condensation of (Barus). p. 526.....	A29.1:891 <sup>3</sup>
Same (Barus). 1895.....	A29.3:12
Atmospheric phenomena (Hobbs). 1902. p. 487.....	A29.6:30
Atmospheric precipitation, variations of lake levels and (Henry). 1899.....	A29.2:L15
<i>See also</i> Precipitation.	
<b>Atmospheric pressure:</b>	
High and low (Morrill). 1895. p. 157.....	A29.6:23

# Index

	Classification no.
Atmospheric pressure—Continued	
High and low (Taylor). 1897. p. 350.....	A29.6:25
same (Garriott). 1895 to 1898. p. 593 .....	A29.6:26
same, monthly report on, June, 1895. (Hazen).....	A29.6:23
same (Bigelow). July-Oct., 1895.....	A29.6:23
same (Hazen). Nov., 1895–Nov., 1899.....	A29.6:
same (Frankenfield). Dec. 1899–Apr., 1900.....	A29.6:
same (Hunt). May, 1900 .....	A29.6:28
same (Frankenfield). June–Dec., 1900 .....	A29.6:28
same Jan.–May, 1901.....	A29.6:29
same (Hunt). June–Aug., 1901 .....	A29.6:29
same Sept., 1901 .....	A29.6:29
same (Frankenfield). Oct.–Nov., 1901.....	A29.6:29
same (Hunt). Jan.–Oct., 1902 .....	A29.6:30
Low—	
effect of, in determining weather conditions in upper Missis- sippi Valley (Hazen). 1896. p. 89.....	A29.6:23
warm air attending (Abbe). 1894. p. 464.....	A29.6:22
Measurement of barometers and (Marvin).....	A29.11:F
Reduction of (Morrill). 1897. p. 572.....	A29.6:25
Report on (Bigelow). 1895. p. 117.....	A29.6:23
<i>See also</i> Meteorological observations.	
Atmospheric radiation:	
Research conducted, at Allegheny observatory and at Providence, R. I. (Very). 1900.....	A29.5:G
Very's memoir on, review of (Dorsey). 1900. p. 394 .....	A29.6:28
<i>See also</i> Electrodynamic radiation.	
Atmospheric refractions at surface of water (Abbe). 1896. p. 371....	A29.6:24
Atmospheric rolls, horizontal, report on (Proctor). 1896. p. 367....	A29.6:24
Atmospheric survey, United States daily (Moore). 1897.....	A29.2:At6 <sup>1</sup>
Atmospheric temperatures during July (Phillips). 1895. p. 253.....	A29.6:23
Atmospheric vapor, note on (Abbe). 1897. p. 208.....	A29.6:25
Atmospheric waves (Abbe). 1894. p. 464.....	A29.6:22
Attica, Kans., sorghum sugar experiments at, in 1889. (Wiley). pp. 9, 26.....	A7.3:26
Same (Carr). p. 72.....	A7.3:26
Atwater, Helen Woodard. Bread and principles of bread making. 1900 .....	A1.9:112
Atwater, Wilbur Olin:	
Agricultural experiment stations in Europe. p. 517.....	A1.1:875
same, pt. 2. p. 466 .....	A27.9:14
Agricultural science, recent progress in. 1874. p. 26.....	A27.9:12
Connecticut Experiment Station, address on. 1901. p. 51.....	A10.3:99
Dietaries in public institutions. 1901. p. 393 .....	A1.10:901
Fertilizers—	
cooperative experimenting as a means of studying effects of fertilizers and feeding capacities of plants. 1882 .....	A1.8:18
effects of, and feeding capacities of plants, cooperative experi- menting as a means of studying. 1882. p. 27 .....	A1.8:22
various, results of field experiments with. 1883 .....	A1.8:31
Food, chemistry and economy of, methods and results of inves- tigations on. 1895.....	A10.3:21
Food and body material, available energy of. 1901. p. 112.....	A10.3:99
Food and diet. 1894. p. 357 .....	A1.10:894
Foods, nutritive value and cost. 1894.....	A1.9:23
Holland experiment stations. 1895. p. 669.....	A10.6:5
Nitrogenous compounds of animal and vegetable substances, sug- gestions regarding nomenclature of. 1899. p. 118.....	A10.3:65
Nutrition, principles of, and nutritive value of food. 1901.....	A1.9:142
<i>See also</i> , for reports as chief of Experiment Stations Office, 1888– 1890 .....	A10.1:
Atwater, Wilbur Olin, and Benedict, Francis G. Metabolism of mat- ter and energy in human body, experiments on; with coopera- tion of A. W. Smith and Arthur Peyton Bryant. 1899.....	A10.3:69
Atwater, Wilbur Olin, Benedict, Francis G., Bryant, Arthur Peyton, Smith, A. W., and Snell, J. F. Metabolism of matter and energy in human body, experiments on, 1898–1900. 1902 ....	A10.3:109

	<b>Index</b>
	<b>Classification no.</b>
Atwater, Wilbur Olin, and Bryant, Arthur Peyton:	
Chemical composition of American food materials. 1899 .....	A10.3:28 <sup>s</sup>
Dietary studies in Chicago, Ill., in 1895 and 1896, conducted with cooperation of Jane Addams and Caroline L. Hunt, of Hull House. 1898 .....	A10.3:55
Dietary studies in New York in 1896 and 1897. 1902 .....	A10.3:116
Dietary studies of Harvard and Yale boat crews. 1900 .....	A10.3:75
Atwater, Wilbur Olin, Johnson, S. W., and Cook, Geo. H. Agricultural experiment station work, report of committee on, to convention of Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., Oct., 1887 .....	A1.8:45
Atwater, Wilbur Olin, and Langworthy, Charles Ford. Metabolism experiments in which the balance of income and outgo was determined, digest of .....	A10.3:45
Atwater, Wilbur Olin, and Rosa, Edward Bennett. Respiration calorimeter, new, description of, and experiments on conservation of energy in human body. 1899 .....	A10.3:63
Atwater, Wilbur Olin, and Sherman, H. C. Muscular work, severe and prolonged, effect of, on food consumption, digestion, and metabolism. 1901 .....	A10.3:98
Atwater, Wilbur Olin, and Woods, Charles Dayton:	
Chemical composition of American food materials. 1896 .....	A10.3:28 <sup>1</sup>
Dietary studies—	
New York City in 1895 and 1896 .....	A10.3:46
Purdue University, Lafayette, Ind., comments on. 1896. p. 23. ....	A10.3:32
University of Missouri, comments on. 1896. p. 21 .....	A10.3:31
University of Tennessee, comments on. p. 33 .....	A10.3:29
with reference to food of negro in Alabama in 1895 and 1896, conducted with cooperation of Tuskegee Normal and Industrial Institute and the Agricultural and Mechanical College of Alabama .....	A10.3:38
Atwater, Wilbur Olin, Woods, Charles Dayton, and Benedict, Francis G. Metabolism of nitrogen and carbon in human organism, with respiration calorimeter of special construction, report of preliminary investigation on, etc. 1897 .....	A10.3:44
Atwood, Geo. W. Fruits of Florida. p. 140 .....	A1.1:867
Atwood, W. B. Horticulturists of agricultural experiment stations in U. S., list of, with outlines of work in horticulture at the several stations. 1889 .....	A10.3:4
Aughey, Samuel. See, as joint author, White, C. A.	
August weather (Moore). 1900. p. 343 .....	A29.6:28
Augusta, Ga., Congress of Cotton States, Oct., 1870, address before (Capron). p. 473 .....	A27.9:8
Augusta, Ga., tornado at, Mar. 20, 1895 (Fisher). p. 92 .....	A29.6:23
Aurora:	
Altitude of (Abbe). 1902. p. 314 .....	A29.6:30
Anomalous and sporadic, notes on (Abbe). 1898. p. 260 .....	A29.6:26
Cosmical relations manifested in simultaneous disturbances of, sun, and terrestrial magnetic field (Lemström). 1895. p. 492. ....	A29.3:11 <sup>2</sup>
Florida, note on (Abbe). 1900. p. 294 .....	A29.6:28
Moon and, report on (Hazen). 1898. p. 108 .....	A29.6:26
Note on, of Aug. 19-20, 1894 (Abbe). p. 328 .....	A29.6:22
Related conditions and international cipher code for correspondence respecting (Veeder). 1894. p. 26 .....	A29.3:11 <sup>1</sup>
Remarkable, at Braidentown, Fla., Nov. 18, 1899 (Ten Broeck). p. 582 .....	A29.6:27
South Carolina and Kentucky (Abbe). 1895. p. 297 .....	A29.6:23
Texas, note on (Abbe). 1899. p. 474 .....	A29.6:27
Willets Point, N. Y., record of. 1870-85 (Abbe). p. 253 .....	A29.6:22
Aurora australis of April 20, 1897 (Campbell-Hepworth). p. 204 .....	A29.6:25
Aurora polaris (Abbe). 1894. p. 78 .....	A29.6:22
Auroral light, notes on (Abbe). 1901. p. 512 .....	A29.6:29
Auroral-lunar halo display, report of (Ten Broeck). 1901. p. 551 ..	A29.6:29
Auroral observations on 2d Wellmann expedition made in neighborhood of Franz Josef Land, 1898-99 (Baldwin). p. 107 .....	A29.6:29
Austin, Amory. Rice; its cultivation, production, and distribution in U. S. and foreign countries. 1893 .....	A27.8:6

# Index

Classification no.

## Australasia:

- Agriculture in. 1888. p. 284 ..... A27.9:26
- Meat trade of (Reynolds). p. 92..... A4.1:893-4
- Statistics of agricultural products. 1888. p. 577 ..... A27.9:26
- Statistics of animal industry of, 1899-1900. p. 557 ..... A4.1:900
- See also* Fiji Islands—Malay Archipelago—New Zealand—Queen Charlotte Islands—Tasmania.

## Australia:

- Agricultural statistics of. 1869. p. 461 ..... A27.9:6
- same, 1863-72. p. 516 ..... A27.9:10
- Animal diseases and farm pests in. 1887. p. 535..... A27.9:25
- Cryptophasa unipunctata in, habits and earlier stages (Edwards). 1891. p. 384 ..... A9.7:3
- Entomological importations from, during 1893 (Koebele). p. 33. A9.3:32
- Insects of—
  - notes on some injurious and beneficial (Webster). 1889. p. 361 ..... A9.7:1
  - parasitic and predaceous, studies on (Koebele). 1893..... A1.8:51
  - sent by Albert Koebele to Ellwood Cooper and B. M. Lelong, report on (Coquillett). 1893. p. 251..... A9.7:5
  - same, status of (Coquillett). 1893. p. 24..... A9.7:6
  - See also* Australian ladybird—Fluted scale—Red and black scale.
- Irrigation in; recent investigation, legislation, and administration by colonies of Victoria and New South Wales (Hinton). 1891. p. 235 ..... A15.2:P94<sup>1</sup>
- Live-stock shipments from, to England. p. 77..... A4.1:895-6
- same (Wray). p. 81..... A4.1:895-6
- Mountain meteorological stations in (Abbe). 1898. p. 166..... A29.6:26
- Salmon propagation in. 1867. p. 207..... A27.9:5
- Texas fever in. p. 85..... A4.1:895-6
- Woolgrowing in (Kenworthy). p. 204..... A1.1:864
- See also* Melbourne—New South Wales—Victoria—and headings beginning Australian.

Australian hymenopterous parasite. *See* Fluted scale.

- Australian ladybird, imported (Coquillett). 1889. p. 70 ..... A9.7:2
- Australian lamellicorns, new genus and two new species of (Sharp). 1890. p. 302 ..... A9.7:2
- Australian parasite of icerya purchasi (Williston). 1888. p. 21 ..... A9.7:1
- Australian report on American irrigation, 1884-85 (Deakin). p. 197. A15.2:Ir7<sup>1</sup>
- Australian scymnus established and described in California (Riley). 1892. p. 127 ..... A9.7:5
- Australian weather guide, notes on (Abbe). 1898. p. 365 ..... A29.6:26
- Australian wheat statistics. 1883-84. p. 38. No. 11..... A27.9:22
- Australian wools. 1873. p. 254..... A27.9:11

## Austria:

- Agricultural census of. 1865. No. 6. p. 18..... A27.9:3
- Cereal crops. 1893. p. 270 ..... A27.9:32
- Coast provinces of, forest culture in. 1873. p. 141 ..... A27.9:12
- Foreign commerce of. 1873. p. 189..... A27.9:11
- Phylloxera vastatrix in (Glover). 1875. p. 223..... A27.9:13
- Seeds and plants collected in, by Barbour Lathrop and David G. Fairchild, for section of seed and plant introduction, Agriculture Department. 1900..... A6.6:6
- Statistics Bureau in, creation of. 1873. p. 188..... A27.9:11
- Wines, beers, etc., analysis of, methods proposed for adoption for use in. 1893. p. 155 ..... A7.3:38
- See also* Vienna.

## Austria-Hungary:

- As a factor in world's grain trade; recent use of American wheat in that country. 1897 ..... A12.4:19
- Cereal crops of, value of (Neumann-Spallert). 1883. No. 64. p. 66. A27.9:21
- Climate of, references to sources of information relative to (Hann). 1896. p. 657 ..... A29.3:11<sup>s</sup>
- Crops in. 1876. p. 33..... A27.9:15
- Flax culture in (Hawes). 1892. p. 55..... A11.5:4
- Notes on. 1876. p. 283..... A27.9:14



**Austria-Hungary—Continued**

- People's banks of. 1891. p. 494 ..... A27.9:29  
*See also* Austria—Hungary—Bosnia.
- Autumn haze, notes on (Abbe). 1901. p. 374 ..... A29.6:29
- Avalanches, their formation and prevention (Fernow). 1888. p. 236. A13.3:2
- Axes, coordinate, standard system of, for magnetic and meteorological observations and computations (Bigelow). 1897. p. 201. A29.6:25
- Axima, North American, and its habits (Howard): 1890. p. 365 .. A9.7:2
- Ayres, Horace B. *See*, as joint author, Ashe, W. W.
- Ayres, Horace B., and Ashe, W. W.:  
     Appalachian forests, southern, description of, by river basins. p. 69. A1.2:Ap4<sup>2</sup>  
     Forests and forest conditions in southern Appalachians. p. 45... A1.2:Ap4<sup>2</sup>
- Ayrshire cattle, characteristics of (Howard). p. 193 ..... A1.1:863
- Ayrshire, England, dairies. 1867. p. 56..... A27.9:5
- Azores:**  
     Irrigation in, as presented in Census Bulletin No. 35, Feb. 27, 1891. p. 288 ..... A15.2:P94<sup>1</sup>  
     Weather cablegrams from, notes on (Abbe). 1900. p. 253..... A29.6:28  
     *See also* Ponta Delgata.
- Aztec names and their pronunciation (Abbe). 1900. p. 549 ..... A29.6:28
- Babcock, S. M.:**  
     Address of, as president of Association of Official Agricultural Chemists, at tenth annual convention. 1893. p. 3 ..... A7.3:38  
     Butter, variations in composition of. 1886. p. 25 ..... A7.3:16
- Babcock method for testing milk. *See* Bartlett, James Monroe—Van Slyke, Lincoln Lucius—Winton, Andrew Lincoln.
- Babinet, Jacques:**  
     Floods in water courses, best means of finding rules for predicting. 1894. p. 142..... A29.3:11<sup>1</sup>  
     Forecasting floods, methods in use in France. 1894. p. 94 ..... A29.3:11<sup>1</sup>
- Bachelor of science, four-year course, what studies should be embraced in (Ellis). 1896. p. 47..... A10.3:30
- Bacilli. *See* Bacteria and references thereunder.
- Bacon, curing of, p. 87 ..... A4.1:897  
     *See also* Hog—Pork.
- Bacot, William S. Address of, before National Road Conference, July, 1894. p. 45..... A22.3:10
- Bacteria, practical bearing of investigations in (Smith). 1894. p. 109 ..... A4.3:6  
     *See also* Animals, domestic—references under Bacterial diseases—Cheese—Mare—Milk—Pig—Swine plague bacteria—Tuberculosis bacillus.
- Bacteria and fibrine (Taylor) ..... A18.2:F44
- Bacterial diseases. *See* Bovine tuberculosis—Cabbage—Egg plant—Fowl cholera—Glanders—Hog cholera—Irish potato—Plants—Swine plague—Tuberculosis.
- Bacterial flora of foremilk, relation of cheese-curd inflation to (Bolley). 1896. p. 78..... A10.3:30
- Bacterial products, investigation of effects of, in prevention of animal diseases (De Schweinitz). p. 138..... A1.1:891  
     Same, p. 66..... A4.1:891-2  
     ..... A10.3:25
- Bacteriology, dairy (Conn). 1895 ..... A4.1:899
- Baden-Baden, Germany, Seventh International Veterinary Congress, Aug. 7-12, 1899 (Norgaard). p. 534 ..... A29.6:30
- Baguio, Philippine Islands, climate of (Stetson). 1902. p. 478 .... A29.6:27
- Baguios of Philippines, note on (Abbe). 1899. p. 470 ..... A29.6:27
- Bahama Islands:**  
     Cotton plant in, insects living on or injurious to (Schwarz). 1878. p. 347 ..... A9.2:C82  
     Sisal hemp industry in (McLain). 1891. p. 52 ..... A11.5:3
- Baier, Julius. St. Louis tornado, low pressure in. 1896. p. 332 .. A29.6:24
- Bailey, G. E. Geology of South Dakota west of Missouri River and of Wyoming east of foothills of Rocky Mountains. 1890. p. 65..... A15.2:Ar7
- Bailey, Isaac H. Leather production of America, report accompanying exhibit of Animal Industry Bureau at Paris Exposition of 1889. p. 419 ..... A4.1:887-8

## Index

	Classification no.
Bailey, James S. <i>Cossidae</i> , North American, with facts in life history of <i>cossus centerensis</i> . 1883. p. 49.....	A9.3:3
Bailey, Liberty Hyde:	
Climatology and horticulture, some interrelations of. 1895. p. 431.....	A29.3:11 <sup>1</sup>
Farmers' institutes, history and status in U. S. and Canada. 1900 .....	A10.3:79
Farmers' reading courses. 1899 .....	A10.3:72
same (abridgment). 1900 .....	A1.9:109
Fruits—	
American and Eastern Asian, sketch of relationship between. p. 437.....	A1.10:894
our native, improvement of. 1896. p. 297.....	A1.10:896
Phenological observations, instructions for taking. 1896. p. 328.	A29.6:24
Bailey, S. S. Highway improvement, shall farmers have aid for, from wealth of nation? 1901. p. 63 .....	A22.3:21
Bailey, Vernon:	
Mammals and birds, results of trip through parts of Minnesota and Dakota for purpose of investigating food habits and distribution of. p. 426.....	A1.1:887
same, p. 426 .....	A5.1:887
Pocket gophers of U. S. 1895 .....	A5.3:5
Prairie ground squirrels, or spermophiles, of Mississippi Valley. 1893 .....	A5.3:4
Spermophiles and pocket gophers of Mississippi Valley. p. 185..	A1.1:892
same, p. 185 .....	A5.1:892
Voles, American, of genus <i>Microtus</i> , revision of. 1900 .....	A5.5:17
Bailey, Willard C. Angora goat industry of Asia Minor. p. 493 ...	A4.1:901
Bainbridge-Hoff, Wm. <i>See Hoff</i> .	
Baird, Spencer Fullerton. Origin of domestic turkey. p. 288.....	A1.1:866
Baird, Texas, feeding station at.....	A4.5:57
Baker, F. P.:	
Forestry, paper on. 1883. p. 181.....	A1.7:2
Forestry of Mississippi Valley, preliminary report on. 1883.....	A1.8:28
Forests, timber-culture, etc., condition of, in Southern and Western States. 1884. p. 105 .....	A13.5:4
Lumber and wood trade in certain States. 1884. p. 198.....	A13.5:4
States, forest condition of. 1884. p. 181.....	A13.5:4
Timber lands of U. S., value and management of. 1884. p. 17..	A1.7:5
Baker, Geo. S. Cattle tick and tuberculosis in New South Wales. p. 386 .....	A4.1:898
same, correction, p. 502 .....	A4.1:899
Baker, J. G. Sisal hemp, false, in Florida, description of. 1893. p. 32 .....	A11.5:5
Baker, R. Cattle, best breeds of, adapted for general farmer of Western States. 1883. p. 95 .....	A1.7:2
Baker, William E. Seeds, experiments with. 1870. p. 25 .....	A27.9:8
Bakersfield, California, feeding station at .....	A4.5:57
Baking powders:	
Adulteration of (Crampton). 1889. p. 555 .....	A7.3:13 <sup>5</sup>
same (Weber). 1889. p. 576 .....	A7.3:13 <sup>5</sup>
same (Cornwall). 1889. p. 583.....	A7.3:13 <sup>5</sup>
Character and constitution of (Crampton). p. 163 .....	A7.1:889
Baking powders and baking-powder chemicals, analysis of, provisional method for (Winton). 1902. p. 98 .....	A7.3:65
Balch, Edwin Swift. Evaporation underground, report on. 1901. p. 545 .....	A29.6:29
Baldwin, Evelyn B.:	
Auroral observations on 2d Wellmann expedition made in neighborhood of Franz Josef Land, 1898-99. p. 107.....	A29.6:29
Meteorological work, outline of scope and character of, in Franz Josef Land, 1898-99. 1901. p. 351.....	A29.1:900
Baldwin, La. <i>See Des Lignes Sugar Experiment Station</i> .	
Ball, Carleton Roy:	
Grasses and fodder plants of Potomac flats. 1900.....	A3.4:28
Johnson grass, investigations made during season of 1901. 1902 ..	A19.3:11



	<b>Index</b> Classification no.
<b>Ball, Carleton Roy—Continued</b>	
Winter forage crops for South. 1902.....	A1.9:147
<i>See also</i> , as joint author, Scribner, Frank Lamson.	
<b>Ball, E. D.</b> Entomology, economic, simple form of accessions catalogue of. 1902. p. 37 .....	A9.6:31
<b>Ball, Hector L.:</b>	
Climate and crop report, season of 1898, Alaska section. p. 548..	A29.6:26
Tornado at Eaglesmere, Pa., June 27, 1892. p. 309 .....	A29.6:20
Weather Bureau service in Alaska. 1898. p. 254 .....	A29.6:26
<b>Balloon ascensions:</b>	
High, note on (Abbe). 1896. p. 16 .....	A29.6:24
International, June 8, 1898, notes on (Abbe). p. 262 .....	A29.6:26
Meteorological, at Strassburg, Germany (Rotch), 1901. p. 298 ..	A29.6:29
Report of—	
1891. (Hazen). p. 517.....	A29.1:891 <sup>3</sup>
December 4, 1894 (Abbe). 1894. p. 507.....	A29.6:22
Nov. 14, 1896 (Assmann). p. 457 .....	A29.6:24
Mar. 24, 1899, in France (Bigelow). p. 197 .....	A29.6:27
Results of, at St. Petersburg, May 20 to June 1, 1878 (Rykatcheff). p. 392 .....	A29.6:28
Simultaneous, report on (Abbe). 1896. p. 415.....	A29.6:24
<b>Balloon voyages:</b>	
Barometer needed in, notes on (Abbe). 1900. p. 552 .....	A29.6:28
Long, note on (Abbe). 1900. p. 113.....	A29.6:28
<b>Balloons:</b>	
Aerial voyages by, notes on (Rotch). 1900. p. 553 .....	A29.6:28
Altitudes attained by, photographic apparatus for measuring (Cailletet). 1897. p. 443.....	A29.6:25
Kites and clouds and (Abbe). 1896. p. 206 .....	A29.6:24
Station for, near Berlin, Germany (Abbe). 1900. p. 13 .....	A29.6:28
Study of upper atmosphere by means of (Kremser). 1896. p. 725..	A29.3:11 <sup>2</sup>
Work with, at Trappes, France, results of (Abbe). 1899. p. 411..	A29.6:27
<i>See also</i> Balloon ascensions—Balloon voyages.	
<b>Baltimore, Md.:</b>	
Exports from, 1861-64. p. 35. No. 1.....	A27.9:3
Temperature curve for May, normal, marked rise in (Fassig). 1902. p. 68.....	A29.3:31
Temperatures at, study of (Walz). 1899. p. 293 .....	A29.6:27
Temperatures for, hourly (Kimball). 1902. p. 131 .....	A29.6:30
<b>Baltimore oriole and meadow lark (Beal).</b> 1895. p. 419.....	A1.10:895
<b>Bamboo, cultivation of (Hubbard).</b> 1895. p. 29 .....	A13.3:11
<b>Banana flour, how it is prepared (Langworthy).</b> 1900. p. 20.....	A1.9:119
<b>Bananas, partially digested, spurious parasitism due to (Stiles and Hassall).</b> p. 56 .....	A4.3:35
<b>Bandicoots, rats and, trypanosomiasis in.</b> p. 155 .....	A4.1:901
<b>Bane, Will H.</b> <i>See</i> , for reports as superintendent, 1893 and 1894, Document and folding room, Agriculture Department.	
<b>Bang, B.</b> Tuberculosis in domestic animals, preventive measures against. p. 535.....	A4.1:899
<b>Banks, Nathan:</b>	
Entomology, American economic, bibliography of more important writings published on, between June 30, 1888, and Dec. 30, 1896 .....	A9.2:B47 <sup>6</sup>
<i>same</i> , between Dec. 31, 1896, and Jan. 1, 1900 .....	A9.2:B47 <sup>7</sup>
Entomology, North American, list of works on. 1900.....	A9.6:24
Index to Bulletins nos. 1-30 (new series, 1896-1901) of Division of Entomology. 1902 .....	A9.6:36
Nursery stock, principal insects liable to be distributed on. 1902.	A9.6:34
Red spiders of U. S. 1900. p. 65 .....	A9.8:8
<b>Banks:</b>	
Peoples', Austria-Hungary. 1891. p. 494 .....	A27.9:29
<i>same</i> , Germany. 1891. p. 339.....	A27.9:29
Rural cooperative, in Russia. 1891. p. 146 .....	A27.9:29
<b>Barcena, Mariano:</b>	
Climate of City of Mexico. 1896. p. 601 .....	A29.3:11 <sup>3</sup>
Short biography of (Abbe). 1899. p. 158 .....	A29.6:27
<b>Bark-beetle, fruit-tree, circular relative to (Chittenden).</b> 1898.....	A9.5:29

# Index

## Classification no.

Barley:	
Crop, condition of, monthly notes on.....	A27.9:
same, statistics of, annual.....	A27.1:
Food for horses. 1901. p. 29.....	A1.9:133
Rusted, request for specimens of (Dabney). 1894.....	A28.4:14
Smut in, notes on (Galloway). 1889. p. 164.....	A28.5:5
Straw and stubble of, specimens of, requested (Rusk). n. d.....	A28.4:12
Wide drilling and tilling of. 1870. p. 485.....	A27.9:8
<i>See also</i> Cereals — Crops — Farm products.	
Barley and its uses (Shaffer). p. 355.....	A1.1:865
Barnard, W. S. Machinery designed for destruction of cotton worm, experimental tests of. 1883. p. 39.....	A9.3:3
Same, 1885. p. 191.....	A8.1:4
Barnes, Almont:	
Agriculture of South America, report on, with maps and latest statistics of trade. 1892.....	A27.8:2
Goats, keeping, for profit. 1898. p. 421.....	A1.10:898
Barnes, John A.:	
Hams, American, in Germany. p. 519.....	A4.1:898
Trichinæ: German inspection of American hog products. p. 516.....	A4.1:898
Barnett, Claribel Ruth. Sugar beet, references to literature of, ex- clusive of works in foreign languages. 1887.....	A17.3:16
Barns, Pennsylvania, description of (Watts). p. 289.....	A1.1:864
Barnyard manure:	
Report on (Beal). 1894.....	A1.9:21
Value of, etc.—	
1895. p. 570.....	A1.10:895
1896. p. 616.....	A1.10:896
1897. p. 24.....	A1.9:56
Barogram near hurricane center, report on (Abbe). 1896. p. 336..	A29.6:24
Barograph curve, winter, from south Pacific Ocean (Ward). 1897. p. 484.....	A29.6:25
Barograph on ships—	
1898 (Abbe). p. 566.....	A29.6:26
1899 (Abbe). p. 60.....	A29.6:27
1900 (Page). p. 590.....	A29.6:27
<i>See also</i> Atmosphere.	
Barwick, James Arthur. Electric storms of California. 1897. p. 539..	A29.6:25
Barometer:	
Aneroid, report on (Chree). 1898. p. 547.....	A29.6:26
same (Marvin). 1898. p. 410.....	A29.6:26
At sea (O'Leary). 1894. p. 167.....	A29.3:11 <sup>1</sup>
Camphor, notes on (Abbe). 1899. p. 255.....	A29.6:27
Corrections and reductions, notes on (Abbe). 1899. p. 548.....	A29.6:27
Diurnal variation of, notes on (Abbe). 1899. p. 314.....	A29.6:27
History of—	
early (Abbe). 1897. p. 16.....	A29.6:25
letter relative to, comments on (Monchamp). 1899. p. 547 ..	A29.6:27
notes on (Abbe). 1899. p. 546.....	A29.6:27
Method of filling (Partridge). 1896. p. 413.....	A29.6:24
Needed in balloon voyages, notes on (Abbe). 1900. p. 552.....	A29.6:28
Popular substitute for (Abbe). 1895. p. 299.....	A29.6:23
Readings—	
converted into standard pressures (Abbe). 1898. p. 314.....	A29.6:26
metric and English, erroneous conversion of (Marvin). 1898. p. 302.....	A29.6:26
Reduction of—	
to sea level (Hazen). 1894. p. 538.....	A29.6:22
to standard gravity, notes on (Abbe). 1900. p. 549.....	A29.6:28
Used at sea, notes on (Abbe). 1901. p. 459.....	A29.6:29
Used in determining climatology of St. Kitts, comparison of (Alexander). 1901. p. 257.....	A29.6:29
Wind, table of, report on (Garriott). 1897. p. 204.....	A29.6:25
<i>See also</i> Thermoscope.	
Barometers and measurement of atmospheric pressure (Marvin) ....	A29.11:F
Barometric pressure:	
Diurnal variation of (Cole). 1892.....	A29.3:6

	<b>Index</b>
	<b>Classification no.</b>
Barometric pressure—Continued	
Hourly results from self-registers for recording (Abbe). 1897. p. 252 .....	A29.6:25
Rainfall and (Abbe). 1895. p. 172 .....	A29.6:23
Reduction of, to sea level (Morrill). 1896. p. 492 .....	A29.6:23
Relations between strength and direction of ocean currents and (Beehler). 1894. p. 177 .....	A29.3:11 <sup>1</sup>
<i>See also</i> Climatic charts — Seiches.	
Barometric standard of Costa Rica, comparison with (Abbe). 1902. p. 445 .....	A29.6:30
Barometric troughs of plateau region, report on (Hazen). 1895. p. 207 .....	A29.6:23
Barometric wave, daily, westward movement of (Fassig). 1901. p. 495 .....	A29.6:29
same, p. 62 .....	A29.3:31
Barometry of U. S., Canada, and West Indies, report on (Bigelow). 1902 .....	A29.1:901 <sup>2</sup>
Barrett, O. W. Changa or mole cricket in Porto Rico. 1902 .....	A10.12:2
Barringer, P. B. Address of, before Jefferson Memorial and Inter- state Good Roads Convention, Apr., 1902. p. 14 .....	A22.3:25
Barrows, Walter Bradford:	
Crow, common, of U. S. 1895. p. 9 .....	A5.3:6
Crows, food of, special report on. p. 498 .....	A1.1:888
same, p. 498 .....	A5.1:888
Economic ornithology. p. 193 .....	A1.1:892
same, p. 193 .....	A5.1:892
English sparrow in North America, especially in its relation to agriculture. 1889 .....	A5.3:1
Kingbird, or bee martin, food habits of. p. 233 .....	A1.1:893
same, p. 233 .....	A5.1:893
Malodorous carabid, <i>Nomius pygmaeus</i> , Dej, notes on. 1897. p. 49 .....	A9.6:9
San Jose scale, present status of, in Michigan, 1897. p. 27 .....	A9.6:9
Seed planting by birds. p. 280 .....	A1.1:890
same, p. 280 .....	A5.1:890
Barry, Patrick. <i>See</i> , as joint author, Wilder, Marshall P.	
Bartholomew's physical atlas, note on (Kimball). 1902. p. 29 ....	A29.6:30
Bartlett, James Monroe. Milk and cream testing, modification of Babcock method and apparatus for. 1896. p. 104 .....	A7.3:49
<i>See also</i> , as joint author, Huston, Henry Augustus.	
Bartlett, Levi. Wheat growing in New Hampshire. p. 96 .....	A1.1:862
Barus, Carl:	
Atmospheric moisture, report on condensation of. p. 526 .....	A29.1:891 <sup>3</sup>
same, 1894 .....	A29.3:12
Weather Bureau signals. 1892. p. 44 .....	A29.3:7
Basic phosphatic slags, mechanical analysis of (Wiley). 1896. p. 78.	A7.3:49
Basic slag:	
Action of ammonium citrate and citric acid on (Huston and Jones). 1896. p. 68 .....	A7.3:49
Report on (McDonnell). 1897. p. 47 .....	A7.3:51
Basidiomycetous fungi. <i>See</i> <i>Agaricus campestris</i> .	
Basseterre, St. Kitts, W. I., flood of Jan., 1880, at (Alexander). p. 196 .....	A29.6:27
• Bast fibers, uncultivated, of U. S., including history of previous ex- periments with plants and fibers, and brief statements relat- ing to allied species produced commercially in the old world (Dodge). 1894 .....	A11.5:6
Bate, Henry C. Weather forecasts, what classes are most benefited by? are they just what are needed? are they properly dis- seminated and utilized? 1899. p. 41 .....	A29.3:24
Bates, G. Hubert. Marine plants, their uses, with a brief account of curing of Irish moss. p. 423 .....	A1.1:866
Bates, William W. Ship timber in U. S. p. 472 .....	A1.1:866
Batrachians, annotated list of, collected in Idaho by C. Hart Merriam and party, 1890 (Stejneger). p. 109 .....	A5.5:5
<i>See also</i> Frogs — Reptiles and batrachians.	

# Index

Classification no.

## Bats:

- Excrement, use of (McMurtrie). 1873. p. 580 ..... A27.9:11  
 same. 1876. p. 192 ..... A27.9:14  
 Free-tailed, from desert region of southern California, description  
 of new species of (Merriam). 1889. p. 23 ..... A5.5:2  
 same, from Lower Colorado River, Arizona (Merriam). 1889.  
 p. 25 ..... A5.5:2  
 North American, of the family Vespertilionidæ, revision of (Mil-  
 ler). 1897 ..... A5.5:13

*See also* Molossus.

- Batley, Arthur H. Work of press for good roads. 1901. p. 89.... A22.3:21  
 Same. 1902. p. 55 ..... A22.3:22

## Battle, Herbert Bemerton:

- Fertilizer samples—  
 bottled, loss of moisture in, when closed with cork. 1891.  
 p. 159 ..... A7.3:31  
 preparation of, effect of finer grinding in. 1891. p. 160 ..... A7.3:31

- Baturoni, G. September norther on Mexican coast. 1892. p. 252 . A29.6:20

- Bauer, C. E. Is Texas a wine land? 1868. p. 451 ..... A27.9:6

## Bauer, Jacob W.:

- Meteorological observations, should not a book for permanent  
 record of, be furnished to section centers and voluntary sta-  
 tions? 1899. p. 121 ..... A29.3:24

- Meteorological reports of voluntary observers, monthly, exami-  
 nation of; is it desirable to report back to voluntary observer  
 errors and irregularities discovered in his report? 1902. p.  
 172 ..... A29.3:31

- Bavaria, agricultural statistics of. 1867. p. 257 ..... A27.9:5

*See also* Aschaffenburg.

## Bayonne, N. J.:

- Burning of Standard Oil Company's plant at, July 5, 6, and 7,  
 1900, cumulus clouds at (Eadie). p. 433 ..... A29.6:28

- same, meteorological observations during (Mitchell). p. 325. A29.6:28

- Kite corps at, records by (Allen). 1899. pp. 11, 251 ..... A29.6:27

- same (Mitchell). 1900. p. 539 ..... A29.6:28

- Kite observations at (Bayonne Kite Club). 1899. p. 65 ..... A29.6:28

- Beach, Horace. Artesian well investigation, special experts' report.  
 1890. p. 141 ..... A15.2:Ar7

- Beach, S. A. Horticultural work at State Agricultural Experiment  
 Station, Geneva, N. Y., methods of keeping records of. 1898.  
 p. 72 ..... A10.3:49

## Beal, Foster Ellenborough Lascelles:

- Birds, some common, in their relation to agriculture ..... A1.9:54

- Birds that injure grain. 1897. p. 345 ..... A1.10:897

- Blue jay and its food. 1896. p. 197 ..... A1.10:896

- Bobolink, blackbirds, and grackles, food of. 1900 ..... A5.3:13

- Cedar bird, food habits of. p. 197 ..... A1.1:892

- same, p. 197 ..... A5.1:892

- Crow blackbirds and their food. 1894. p. 233 ..... A1.10:894

- Cuckoos, food of. 1898 ..... A5.3:9

- Meadow lark and Baltimore oriole. 1895. p. 419 ..... A1.10:895

- Orchard, how birds affect. 1900. p. 291 ..... A1.10:900

- Woodpeckers, food of, preliminary report on. 1895 ..... A5.3:7

## Beal, Walter Henry:

- Agricultural Colleges and Experiment Stations, American, tenth  
 annual convention of Association of, 1896. p. 541 ..... A10.6:8

- same, eleventh annual convention, 1897. p. 303 ..... A10.6:9

- same, twelfth annual convention, 1898. p. 704 ..... A10.6:10

- Alfalfa silage. 1901. p. 25 ..... A1.9:124

- Barnyard manure. 1894 ..... A1.9:21

- Chemists, Official Agricultural, Association of, convention of, 1896,  
 report on. p. 272 ..... A10.6:8

- same. 1897. p. 404 ..... A10.6:9

- same. 1898. p. 504 ..... A10.6:10

- Clam, long, rapid disappearance of. 1898. p. 19 ..... A1.9:103

- Corn, ear, versus corn-and-cob meal for cows. 1899. p. 16 ..... A1.9:107

**Beal, Walter Henry—Continued**

Cornstalks, waste in feeding. 1899. p. 16 .....	A1.9:107
Cotton seed, value of, to farmer. 1901. p. 24.....	A1.9:124
Cranberries, rotting of, and a proposed remedy. 1900. p. 9.....	A1.9:114
Eggs, preserving in water glass. 1899. p. 17.....	A1.9:103
Fertilizer requirements of crops. 1899. p. 5.....	A1.9:107
Grapevines, girdling or ringing, operation of. 1899. p. 17.....	A1.9:105
Horses and hogs, silage for. 1898. p. 20 .....	A1.9:103
Irrigation, excessive, danger from, and remedy. 1899. p. 5.....	A1.9:103
Lime, fertilizing value of different forms of. 1901. p. 12.....	A1.9:124
Mutton sheep, establishing flock of. 1900. p. 23.....	A1.9:119
Oxeye daisy, beautiful flower and pernicious weed. p. 15 .....	A1.9:103
Pure-food law, working of. 1900. p. 23.....	A1.9:122
Seaweed, valuable agricultural resource of northern coast regions. 1899. p. 5.....	A1.9:105
Soils, sandy, treatment of. 1901. p. 10.....	A1.9:124
Stave silo, value of, to dairy farmer. p. 23 .....	A1.9:103
Unfermented grape juice, preparation of. 1900. p. 27.....	A1.9:122
Water, distilled, for drinking purposes. 1901. p. 5.....	A1.9:124
<i>See also</i> , as editor of proceedings, Agricultural Colleges and Experiment Stations, American, Association of; as joint author, Allen, Edwin West—McBryde, J. Bolton—May, David W.—Smith, C. B.	
Beal, Walter Henry, and Smith, C. B. Liming grass lands. 1900. p. 5 .....	A1.9:122
<b>Beals, Edward A.:</b>	
Chicago weather forecast district, monthly report of, June, July, Dec., 1899.....	A29.6:27
Electricity, static, in Weather Bureau work, importance of. 1896. p. 39 .....	A29.3:18
Oregon weather and Bering Sea ice, notes on, 1890-99. p. 201...	A29.6:28
Portland, Oreg., weather forecast district, monthly report of, Apr.-July, Oct.-Dec., 1900 .....	A29.6:28
same, Jan., Mar.-July, Sept.-Dec., 1901.....	A29.6:20
same, Jan.-Oct., 1902 .....	A29.6:30
Press, commercial bodies, and scientific organizations, relations of weather officials with, how promoted. 1899. p. 69.....	A29.3:24
Bean, J. F. Road question, a farmer's views on. 1901, p. 67.....	A22.3:21
Bean-leaf beetle, report on (Chittenden). 1897. p. 64.....	A9.6:9
<b>Bean weevil:</b>	
Nomenclature and oviposition of. 1892. p. 27.....	A9.7:5
Report on (Slingerland). 1892. p. 86.....	A9.7:5
same. 1892. p. 297 .....	A9.7:4
<b>Beans:</b>	
Blister beetles, note on great damage by. 1886. p. 37.....	A9.3:12
Gray hair-streak butterfly and its damage to. 1895. p. 354.....	A9.7:7
Insects injurious to (Chittenden). 1898. p. 233.....	A1.10:898
Pole, forcing of, under glass (Clark). 1898. p. 13.....	A1.9:105
<i>See also</i> Crops—Velvet bean.	
Beans, peas, and other legumes as food (Abel.) 1900.....	A1.9:121
Bear-grass, results of recent investigations relating to (Dodge). 1893. p. 70 .....	A11.5:5
<b>Bear River:</b>	
Interstate water rights in (Breckons). 1899. p. 26 .....	A10.3:70
Irrigation of valley of, in Utah, 1901 (Stover). 1902. p. 243....	A10.3:119
Water-right problems of. 1899 .....	A10.3:70
Water supply of, and its diversion (Johnston). 1899. p. 9.....	A10.3:70
Beardless brome grass, seed of (Pieters). 1900.....	A6.4:25
<b>Beattie, W. R.:</b>	
Celery culture. 1902.....	A1.9:148
Hydrocyanic-acid gas, use of, for exterminating household insects. 1902. p. 80 .....	A9.6:31
Beaufort wind scale as used at sea (Abbe). 1894. p. 175.....	A29.6:22
Bebber, W. J. van. Weather service, present condition of; proposi- tions for its improvement. 1894. p. 34.....	A29.3:11 <sup>1</sup>
Beachamp, A. Milk, nature of. 1890. p. 154.....	A7.3:24

# Index

	Classification no.
Beckwith, M. H.:	
Corn crambid, abstract of notes on. 1891. p. 42 .....	A9.7:4
Insecticides, use of, practical notes on. 1891. p. 269 .....	A9.7:3
Bedbugs:	
Circular on (Marlatt). 1902 .....	A9.5:47
Report on (Riley). 1889. p. 104 .....	A9.7:2
same (Marlatt). 1896. p. 32 .....	A9.6:4
Bedford area, Virginia, soil survey of (Mooney and others). p. 239 ..	A26.5:901 <sup>1</sup>
Bedle, Benjamin R. Sheffield, England, cost of hauling farm products over wagon roads at. p. 3 .....	A22.4:27
Bee disease. <i>See</i> Foul brood.	
Bee keepers' associations, national, sectional, and State, list of, with officers:	
1899. p. 708 .....	A1.10:899
1900. p. 662 .....	A1.10:900
1901. p. 633 .....	A1.10:901
Bee-keeping:	
Condition of industry, etc., 1889. p. 224 .....	A27.9:27
Directory of departments, boards, societies, colleges, and other organizations in interest of. 1885 .....	A1.8:39
Locations suited to (Benton). 1897 .....	A1.9:59
Report on (Tupper). p. 458 .....	A1.1:865
Statistics of. p. 272 .....	A1.1:868
Winter, report on (Tupper). p. 200 .....	A1.1:867
Bee martin. <i>See</i> Kingbird.	
Beech trees, disease of. 1873. p. 502 .....	A27.9:11
Beef:	
American and European, comparative composition of (Woods). p. 426 .....	A4.1:887-8
Breeding and feeding of, and supply of market therewith (Beverly). p. 103 .....	A1.7:2
same (Morrow). p. 127 .....	A1.7:2
same (Scott). p. 132 .....	A1.7:2
Consumption of, in Saxony. 1887. p. 591 .....	A27.9:25
Exportation of, order regarding. Mar. 9, 1897 .....	A4.5:1
Production of, some essentials in (Curtiss). p. 48 .....	A4.1:897
same. 1898 .....	A1.9:71
Report concerning 6.25 protein factor as applied to (Goss). 1899. p. 94 .....	A7.3:57
Steer and heifer, opinions as to comparative value of. 1898. p. 27 ..	A1.9:73
Supply of—	
American, address on, before 3d national convention of stockmen, Chicago, Nov. 1885 (Colman) .....	A1.8:38
cheap. 1866. p. 436 .....	A27.9:4
in United States. p. 39 .....	A4.1:887-8
same (Salmon). p. 64 .....	A1.1:889
same (Salmon). 1890 .....	A4.2:B39
<i>See also</i> Cattle.	
Beef and beef cattle of the West (Corbett). p. 326 .....	A1.1:862
Beef and dairy cattle, conformation of (Soule). 1902 .....	A1.9:143
Beehler, W. H.:	
Barometric pressure and strength and direction of ocean currents, relations between. 1894. p. 177 .....	A29.3:11 <sup>1</sup>
Marine meteorology, division of, in Hydrographic Office, Navy Department, origin and work of. 1895. p. 221 .....	A29.3:11 <sup>2</sup>
Beer:	
American, composition of, and substances used in adulteration (Crampton). p. 183 .....	A1.1:887
Indian corn (or maize) in manufacture of (Wahl) .....	A1.8:52
Quassia and other hop substitutes in, improved method of detecting (Allen). 1887. p. 376 .....	A7.3:13 <sup>2</sup>
Bees:	
Culture of, circular relating to. 1885 .....	A9.4:22
Great value of, to fruit and seed growers (Benton). 1892. p. 254 ..	A9.7:4
Hive, wheel bugs destroying, note on. 1886. p. 44 .....	A9.3:12
How far do bees fly? (Benton). 1892. p. 319 .....	A9.7:4



**Bees—Continued**

- Langdon nonswarming device (Benton). 1893. p. 230..... A9.7:5  
 Production of honey and wax, statistics. 1901. p. 784 ..... A1.10:901  
 Report on (Riley). 1894. p. 350..... A9.7:6  
 Spraying, with arsenites (Webster). 1892. p. 121 ..... A9.7:5  
     same. 1894. p. 132..... A9.7:7  
 Table showing condition of, March, 1864. No. 2. p. 35 ..... A27.9:2  
*See also* Apiarian exhibit—Apiculture—Bee keeping—Foul brood—Honeybee—Italian honeybee.

**Beeswax:**

- Adulteration of (Wiley and others). 1892. p. 633 ..... A7.3:13<sup>6</sup>  
 Production of, 1869-89. p. 112 ..... A27.9:32

- Beet, growth of, relation of meteorology to (Davy). 1879. p. 284... A1.6:28

*See also* Sugar beets.

- Beet and beet-root sugar (Cull). 1873. p. 366 ..... A27.9:11

- Beet insects, notes on (Bruner). 1891. p. 229 ..... A9.7:3

- Beet-juices, analysis of, with table for calculation of analyses (Cramp-  
 ton). 1884. p. 31 ..... A7.3:15

- Same, at Fort Scott, Kans., 1887 (Crampton). p. 15..... A7.3:17

- Beet-leaf pegomyia, report of (Howard). 1895. p. 379..... A9.7:7

**Beet-sugar:**

- Chemical memoranda on (Brown). 1872. p. 218 ..... A27.9:10

- Encouragement of sorghum industry and. 1883 ..... A1.8:26

- Europe (Gennert). p. 158..... A1.1:868

- same, p. 334 ..... A1.1:869

- Factories in California, information relative to. 1870. p. 357... A27.9:8

- same, 1887, p. 452 ..... A27.9:25

- Factory at Alvarado, California. 1870. p. 280..... A27.9:8

- Machinery and processes for manufacture of, recent improvements  
 in (Spencer). 1885. p. 106..... A7.3:5

- Maine (Blackwell). 1883. p. 26. No. 61..... A27.9:21

**Manufacture of—**

- culture of sugar beet and (Wiley). 1890..... A7.3:27

- France and Germany, progress of. 1866. p. 179..... A27.9:4

- German zollverein. 1870. p. 42 ..... A27.9:8

- letters on. 1869. p. 373\* ..... A27.9:7

- Northwest as compared with countries of Europe (Frederick-  
     sen). 1879. p. 275 ..... A1.6:28

- progress in. 1872. p. 14 ..... A27.9:10

- report on (Hulse). 1870. p. 147..... A27.9:8

- success of. 1871. p. 195..... A27.9:9

- use of residues from, in cattle feeding (Spencer). 1898. p.  
     213 ..... A1.10:898

- Notes on. 1865. No. 6. p. 23..... A27.9:3

**Production of—**

- note on (Capron). 1868. p. 59 ..... A27.9:6

- possible influence of importation of Hawaiian sugar on in U. S. ... A1.4:7

- Statistics of, 1868-69. p. 73 ..... A27.9:8

*See also* Beet and beet-root sugar—Sugar beets.

**Beet-sugar industry in U. S.:**

1870. p. 210 ..... A1.1:870

- 1873 (Cull). p. 441..... A27.9:11

- 1897 (Saylor). p. 161..... A1.2:B39<sup>1</sup>

- same..... A1.2:B39<sup>2</sup>

- 1897 (Wiley). p. 11..... A1.2:B39<sup>1</sup>

- 1898 (Saylor). p. 13..... A1.2:B39<sup>4</sup>

- 1898 (Wiley). p. 131..... A1.2:B39<sup>4</sup>

- 1900..... A1.8:69

- 1900, p. 750 ..... A1.10:900

- 1901 ..... A1.8:72

- 1901 (Saylor). p. 487..... A1.10:901

**Beetles:**

- Certain imported, distribution of (Chittenden). 1895. p. 326... A9.7:7

- Food and habits of (Glover). p. 78..... A1.1:868

- Luminous. 1874. p. 221..... A27.9:12

- Destroying twigs (Glover). 1871. p. 477..... A27.9:9

\* By a misprint, this page number appears twice.



# Index

Classification no.

## Beetles—Continued

*See also* Agonoderus palpeus — Agrilus — Allorhina — Ambrosia beetles — Amphizoa — Asparagus beetles — Australian lamellicorns — Bark beetle — Bean leaf-beetles — Blister beetles — Bruchus — Carabid malodorous — Carpet beetle — Cicindela limbata — Clover-leaf beetle — Coccinellidæ — Coleoptera — Colorado potato beetle — Cottonwood beetle — Cucumber beetles — Curculio — Curculionidæ — Dermestidæ — Diabrotica soror — Diabrotica 12-punctata — Eburia quadrimaculata — Elm leaf-beetle — Fig eater — Flea beetle — Graptodera foliacea — Hornia — Horse-radish flea-beetle — Hylesinus sericeus — Hyperaspis signata — Lachnosterna — Lachnosterna fusca — Lady-bird — Lamellicorns — Languria — Leaf-mining locust-beetle — Leonia Rileyi — Locust beetle — Mexican cotton-boll weevil — Novius cardinalis — Pea weevil — Pea and bean weevils — Pine bark-beetle — Plum curculio — Plum gouger — Poplar goniocena — Potato bug — Potato-bug weevil — Red-legged flea-beetle — Rhinoceros beetle — Rose-bug — Rose chafer — Rose leaf-beetle — Rove beetle — Scolytidæ Scolytids — Scymnus — Spruce bark-beetle — Strawberry leaf-flea beetle — Strawberry weevil — Sugar-cane beetle — Tan-bark beetle — Tobacco flea-beetle — Tobacco-stalk weevil — Twig girdler.

- |  |           |
|--|-----------|
| Beeves, early maturity of. 1886. p. 141 .....  | A27.9:24  |
| <i>See also</i> Cattle.  |           |
| Beggar weed, Florida, report on (Smith). 1899 .....  | A3.4:13   |
| Begonia, leaf sickness in, Aphelenchus olesistus cause of (Bos). 1893. p. 161 .....  | A9.7:6    |
| Behr, Herman, and Klee, W. G., California, plants worth trying in. 1892. p. 141 .....  | A1.8:20   |
| Belden, W. S. Climate and crop sections, Weather Bureau, publications of, necessity for binding and otherwise preserving. 1902. p. 177 ..... | A29.3:31  |
| Belfast, Ireland, British Association, 1900. Address on meteorology at (Schuster). p. 448 .....  | A29.6:30  |
| Belgian Exposition of Agriculture and Forestry, 3d, 1889, advance notice of. p. 235 .....  | A27.9:7   |
| Belgian State Laboratories, official methods of analyses of fertilizing and feeding stuffs adopted by. 1899. p. 304 .....                    | A10.6:10  |
| Belgium:   |           |
| Agricultural associations in (De Vuyst). 1898. p. 3.....   | A10.6:9   |
| Agricultural census of. 1885. p. 37. No. 24 .....  | A27.9:23  |
| Agricultural education and research in (True). 1896. p. 361 ...  | A1.10:896 |
| Agricultural education in (De Vuyst). 1893. p. 703 .....   | A10.6:4   |
| Agricultural experiment stations in (Petermann). 1895. p. 550 .....  | A10.6:5   |
| Agricultural schools in, organization and management of (Welch). 1885 .....  | A1.8:36   |
| Agriculture of. 1873. p. 562.....  | A27.9:11  |
| American horses in (Storer). 1897. p. 24 .....   | A1.2:H78  |
| Cost of hauling farm products over wagon roads in (Roosevelt). p. 1 .....  | A22.4:27  |
| Crops in 1890 and 1889. p. 643 .....   | A27.9:28  |
| Dead animals in, disposition of (Roosevelt). p. 354 .....  | A4.1:899  |
| Flax culture in (Wallace). 1892. p. 47 .....   | A11.5:4   |
| Horse breeding in (Winslow). p. 503 .....  | A4.1:900  |
| Markets for American products in. 1895.....  | A12.3:6   |
| Meteorology in, history of, notes on (Abbe). 1901. p. 69 .....   | A29.6:29  |
| Poultry raising in (Lincoln). p. 506.....  | A4.1:900  |
| Roads of (Valliant). 1901. p. 87 .....   | A22.3:21  |
| <i>See also</i> Brussels—Ghent—Liège.  |           |
| Bellevoe, M. A. Monomorium pharaonis, observations on. 1890. p. 230.....   | A9.7:2    |
| Belvosia, study of (Williston). 1893. p. 238 .....   | A9.7:5    |
| Ben Nevis Observatory, Scotland, notes on (Abbe). 1899. p. 470..   | A29.6:27  |
| Benedict, Francis G. <i>See</i> , as joint author, Atwater, Wilbur Olin.   |           |

	<b>Index</b>
	<b>Classification no.</b>
<b>Bengal, India:</b>	
Famine and food supply in. 1874. p. 232 .....	A27.9:12
Jute crop of. 1888. p. 539 .....	A27.9:26
Rent unions in. 1875. p. 395 .....	A27.9:13
Bennett, A. W. Flowers, fertilization of. 1873. p. 586 .....	A27.9:11
Bennett, Frank, jr. <i>See</i> , as joint author, Smith, William G.	
Bennett, Joseph B. <i>See</i> , for reports as appointment clerk, 1895-1902, Appointment clerk, Agriculture Department.	
<b>Bennett, Thomas:</b>	
Cutworms, remedies for. p. 274 .....	A1.1:885
Insecticide experiments at Trenton, N. J. 1886. p. 27 .....	A9.3:11
<b>Bentley, Henry Lewis:</b>	
Cattle ranges of Southwest, history of exhaustion of pasturage and suggestions for its restoration, 1898 .....	A1.9:72
Forage crops and range improvements, progress of experiments in, at Abilene, Tex. 1899 .....	A3.4:23
Grasses and forage plants of central Texas. 1898 .....	A3.3:10
Range improvement in central Texas, experiments in. 1902 .....	A19.3:13
<b>Bentley, W. A.</b> Snow crystals, twenty years' study of. 1901. p. 212 .....	A29.6:29
<b>Benton, Frank:</b>	
Apiarian exhibit at Columbian Exposition, 1894. p. 242 .....	A9.7:6
Bee keeping. 1897 .....	A1.9:59
Bees. How far do bees fly? 1892. p. 319 .....	A9.7:4
Bees of great value to fruit and seed growers. 1892. p. 254 .....	A9.7:4
Honey bee, a manual of instruction in apiculture .....	A9.6:1
Langdon nonswarming device. 1893. p. 230 .....	A9.7:5
<i>See also</i> , as translator, Le Cocq.	
<b>Berg, Walter G.</b> Timber trestle bridges, economical designing of, notes on report of A. L. Johnson. p. 34 .....	A13.3:12
<b>Bergami, Francis.</b> <i>See</i> Kilgore, Benjamin Wesley.	
<b>Bergen Point, N. J.</b> Temperatures obtained by kites at (Allen). 1898. p. 161 .....	A29.6:26
<b>Bergholz, Paul.</b> Typhoons of Orient; origin, paths, and limiting zones of, translated by Cleveland Abbe. 1899. p. 402 .....	A29.6:27
<b>Bergroth, E.</b> Water bug found by J. L. Zabriskie, note on. 1892. p. 321 .....	A9.7:4
<b>Bering Sea ice and Oregon weather</b> , notes on, 1890-99 (Beals). p. 201 Same (Abbe). pp. 163, 206 .....	A29.6:28 A29.6:28
<b>Berlin, Germany:</b>	
Cost of hauling farm products over wagon roads at (De Kay). p. 4. ....	A22.4:27
Dead animals in, disposition of (Mason). p. 349 .....	A4.1:899
Kite and balloon station near, note on (Abbe). 1900. p. 13 ....	A29.6:28
Meat consumption in. 1890. p. 45 .....	A27.9:28
<b>Berlin, Germany, International Aeronautical Congress at, 1902,</b> report on (Rotch). p. 356 .....	A29.6:30
<b>Berlin, Germany, International Congress for consideration of best methods for checking or curing Tuberculosis, May 24-27, 1899</b> (De Schweinitz). p. 126 .....	A4.1:899
<b>Berlin, Germany, International Geographical Congress, 1899, notes on (Abbe). p. 470 .....</b>	A29.6:27
<b>Berlin, Germany, Royal Agricultural Museum, description of. 1874.</b> p. 321 .....	A27.9:12
<b>Bermuda, peach pest in. 1890. p. 5 .....</b>	A9.7:3
<b>Bermuda grass:</b>	
Circular on (Hitchcock). 1901 .....	A3.4:31
Monephora bicinta damaging, note on. 1886. p. 34 .....	A9.3:12
Use of, for hay (Ransom). p. 87 .....	A1.1:883
same. No. 61. p. 27 .....	A27.9:21
<b>Bermuda lily disease, preliminary report of investigations (Woods).</b> 1897 .....	A28.3:14
<b>Bernburg Agricultural Experiment Station, sand cultures at, methods of (Hellriegel). 1895. pp. 749, 835 .....</b>	A10.6:5
<b>Berolinense herbarium, American panicums in (Holm). 1897. p. 17 .....</b>	A3.3:4
<b>Berries.</b> <i>See</i> Asparagus — Blackberries — Blueberries — Cranber- ries — Elderberry — Mulberries — Strawberries.	

# Index

## Classification no.

### Berry, James:

- Address as chairman section of climate and crop service before second convention of Weather Bureau officials held at Milwaukee, Wis., Aug. 27, 28, 29, 1901. 1902. p. 184..... A29.3:31
- American Association of State Weather Services, 2d annual convention of, proceedings of, with reference to former conventions. 1893. p. 228..... A29.6:21
- Climate and crop service publications. 1899. p. 150..... A29.6:27
- Climate and crop service reports, extracts from, Oct., 1895-Dec. 1902 ..... A29.6:
- Corn, wheat, cotton, sugar, and rice region, Weather Bureau service, instructions governing. 1897..... A29.12:C81
- Weather forecasts, methods employed in distribution of. 1901. p. 14..... A29.6:29

*See also*, as editor of proceedings, Weather Bureau officials, conventions.

- Berry, James E. State weather services, reports of, Apr., May, Sept., 1895. pp. 127, 164, 332 ..... A29.6:23

- Berry, Thomas. Amity canal in Colorado, duty of water under. 1900. p. 159 ..... A10.3:86

- Berseem, great forage and soiling crop of Nile Valley (Fairchild). 1902 ..... A19.3:23

- Bertelli, Fr. Timotheus. Magnetic declination, discovery of, by Christopher Columbus. 1895. p. 486 ..... A29.3:11<sup>2</sup>

### Berthoud, E. L.:

- Agricultural resources of Jefferson County, Colorado. 1869. p. 381\* ..... A27.9:7

- Locusts in North America, extracts from early literature on. 1883. App. p. 59..... A8.1:3

### Besana, Charles:

- Butter and artificial butter, methods of distinguishing. 1889. p. 107..... A7.3:24

- Butters, mixed, application of methods Reichert, Meissl, and Wollny to. 1890. p. 105 ..... A7.3:24

Bessey, Ernst A. *See*, as joint author, Webber, Herbert John.

- Besson, Louis. Meteorology, optical, circumhorizontal arc in. 1902. p. 486..... A29.6:30

- Betts, Arthur. Irrigation by use of wire, report on, 1899. p. 301... A29.6:27

- Beutelspacher, Gustave. Canadian-British cattle trade, decrease in. p. 515 ..... A4.1:899

Beverages. *See* Cider — Coffee — Fermented alcoholic beverages — Liquors — Tea.

- Beverly, Robert. Beef, breeding and feeding of, and supply of market therewith. 1883. p. 103..... A1.7:2

### Bevier, Isabel:

- Negroes, dietary studies among, in eastern Virginia, in 1898. 1899. p. 27 ..... A10.3:70

- Nutrition investigations in Pittsburg, Pa., 1894-96..... A10.3:52

- Bevier, Isabel, and Sprague, Elizabeth C. Dietary study at Lake Erie College, Painesville, Ohio. 1901. p. 27..... A10.3:91

- Biard, L. True ash in cane-sugar manufactory products incinerated with sulphuric acid. 1891. p. 77 ..... A7.3:31

- Bibio albipennis as an injurious insect, note on. 1886. p. 36..... A9.3:12

- Bicarbonate of soda in milk, detection of (Pade). 1889. p. 170... A7.3:24

- Bicyclers, mechanical work and efficiency of (Carpenter). 1901. p. 57 ..... A10.3:98

- Bidwell, John. Seeds, experiments with. 1870. p. 24..... A27.9:8

- Big Cottonwood Creek, Utah, duty of water on (Gemmell). 1900. p. 197 ..... A10.3:86

- Same (Gemmell). 1900. p. 165 ..... A10.3:104

- "Big head" (disease) of sheep in Utah (Rowe). p. 230..... A4.1:901

- Big Horn Mountains of Wyoming, plants from (Rose). 1896. p. 567. A6.5:3

- Big Thompson River, irrigation from (Field). 1902..... A10.3:118

- Big trees of California, 1900..... A13.2:B48

- Same, 1900 ..... A13.3:28

\* By a misprint, this page number appears twice.

	<b>Index</b> Classification no.
<b>Bigelow, Frank Hagar:</b>	
Atmosphere—	
line integrals in. 1900. p. 535 .....	A29.6:28
statics and kinematics of, in U. S., studies on. 1902. pp. 13, 80, 117, 163, 250, 304, 347 .....	A29.6:30
Atmospheric pressure—	
high and low, monthly notes on, July–Oct., 1895 .....	A29.6:23
report on. 1895. p. 117 .....	A29.6:23
Balloon ascensions on March 24, 1899, in France. p. 197 .....	A29.6:27
Barometry of U. S., Canada, and West Indies. 1902 .....	A29.1:901 <sup>2</sup>
Chicago weather forecast district, monthly report of, July, 1900 ..	A29.6:28
Cloud observations—	
international, of Weather Bureau. 1899. p. 404 .....	A29.6:27
international, some results of, for U. S. 1899. p. 8 .....	A29.6:28
made in cooperation with scheme of International Cloud Commission, results of .....	A29.1:899 <sup>2</sup>
Coordinate axes, standard system of, for magnetic and meteorolo- gical observations and computations. 1897. p. 201 .....	A29.6:25
Cyclones, hurricanes, and tornadoes. 1898. p. 525 .....	A1.10:898
Eclipse meteorology and allied problems. 1902 .....	A29.5:I
Hann's (Julius) meteorology. 1902. p. 298 .....	A29.6:30
Magnetic observations, notes on new method for, discussion of. 1892 .....	A29.3:2
Meteorological observations made to determine probable state of sky at several stations along path of total eclipse of sun, May 28. 1900. 1897. p. 394 .....	A29.6:25
Same. 1898. p. 404 .....	A29.6:26
Meteorologist, work of, for benefit of agriculture, commerce, and navigation. 1899. p. 71 .....	A1.10:899
Meteorology—	
higher, in Weather Bureau. 1902. p. 19 .....	A29.3:31
periodic terms in, due to rotation of sun on its axis. 1895. p. 500 .....	A29.3:11 <sup>2</sup>
Meteorology and magnetism, monthly report on, March, 1895– June, 1896 .....	A29.6:
Mexico, National Meteorological Congress of, 1st, 1900, digest of report of. p. 311 .....	A29.6:30
Solar and terrestrial magnetism in their relations to meteorology. 1898 .....	A29.3:21
Solar magnetism, report on relations of, to terrestrial magnetism and meteorology. p. 519 .....	A29.1:891 <sup>2</sup>
Storms, storm tracks, and weather forecasting. 1897 .....	A29.3:20
Sun spots and weather, connection between. 1895. p. 91 .....	A29.6:23
Temperature—	
comparison of, with magnetic horizontal force. 1894. pp. 415, 460, 504 .....	A29.6:22
same. 1895. p. 7 .....	A29.6:23
diurnal range of, variation of, with latitude and locality. 1902. p. 134 .....	A29.6:30
Total eclipse of sun, May 28, 1900, probable state of sky along path of. 1899 .....	A29.3:27
Weather forecasts and storm warnings, monthly notes on, June– Aug., 1898 .....	A29.6:26
<b>Bigelow, Willard Dell:</b>	
Food preservatives, use and abuse of. 1900. p. 551 .....	A1.10:900
Foods and food control. 1902 .....	A7.3:69
Liquors, fermented and distilled, provisional methods for analysis of. 1902. p. 81 .....	A7.3:65
Meat and meat products, provisional methods for analysis of. 1902. p. 7 .....	A7.3:65
Preserved meats, adulterations of, report on, with collaboration of Edward Mackay Chance, L. S. Munson, L. M. Tolman, and others. 1902. p. 1375 .....	A7.3:13 <sup>10</sup>
Pure-food laws of European countries affecting American exports. 1901 .....	A7.3:61
Wines, American, composition of. 1900 .....	A7.3:58

# Index

Classification no.

Bigelow, Willard Dell—Continued	
<i>See also</i> , as collaborator, McElroy, Karl P. — Wiley, Harvey Washington; as joint author, Ewell, Erwin Edgar; as joint editor, Chemical analysis, methods of.	
Bigelow, Willard Dell, and Sweetser, William S. Food adulteration, methods for determination of. 1897. p. 117 .....	A7.3:51
Billings, John Shaw, and Curtis, Edward. Fluids of diseased cattle with reference to presence of cryptogamic growths. 1869. p. 174 .....	A1.2:C29 <sup>1</sup>
Same, p. 156 .....	A1.2:C29 <sup>1</sup>
Billings, Mont. <i>See</i> Whitney, Milton, and Means, Thomas Herbert.	
Bingham, Joseph H. Address of, before American Association of Farmers' Institute Workers, at seventh annual meeting. 1902. p. 11 .....	A10.3:120
Biochemic investigations, culture media for (De Schweinitz). p. 145 .....	A4.1:899
Biochemic laboratory, investigations conducted by, in 1892 (De Schweinitz). p. 119 .....	A1.1:892
Same, p. 105 .....	A4.1:891-2
Same. 1893. p. 161 .....	A1.1:893
Biologic notes on New Mexico insects (Townsend). 1892. p. 37...	A9.7:5
Biological and dairy building, at New York State Experiment Station, Geneva, N. Y., report on. 1899. p. 401 .....	A10.6:10
Biological investigation of Hudson Bay region (Keewatin) (Preble). 1902 .....	A5.5:22
Biological reconnaissance of south central Idaho (Merriam). 1891...	A5.5:5
Biological reconnaissance of Yukon River region. 1900 .....	A5.5:19
Biological Survey Division, Agriculture Department:	
Publications of .....	A5.
circular relative to distribution and sale of. 1896 .....	A5.4:20
Relation of, to agriculture. 1890. p. 125 .....	A5.5:3
Work of, for farmer (Merriam). 1897. p. 115 .....	A1.10:897
Biological Survey:	
Mount Shasta, Cal., results of (Merriam). 1900 .....	A5.5:16
San Francisco mountain region and desert of Little Colorado River, Arizona, results of (Merriam). 1890 .....	A5.5:3
Biology. <i>See</i> Metabolism.	
Birch:	
Coccid on, new (Hubbard and Pergande). 1898. p. 13 .....	A9.6:18
Occurrence of <i>Bucculatrix canadensisella</i> on, in Rhode Island (Packard). 1892. p. 14 .....	A9.7:5
Plant-lice, two species of, inhabiting, life history of (Pergande). 1901 .....	A9.8:9
Birch trees, destructive borer enemy of (Chittenden). 1898. p. 44.	A9.6:18
Bird, William N. D. Ergotism among cattle in Kansas. p. 317....	A4.1:895-6
Bird day in the schools .....	A5.4:17
Bird-lice. <i>See</i> Mallophaga.	
Bird migration in Mississippi Valley in 1884 and 1885 (Cooke). 1888.	A5.3:2
Birds:	
As weed destroyers (Judd). 1898. p. 221 .....	A1.10:898
Bird laws and (Dodge). p. 431 .....	A1.1:864
Bounties on, circular in relation to. (n. d.) .....	A5.4:19
Destruction of—	
cotton worms by (Redfield). 1883. No. 65. p. 25 .....	A27.9:21
hairy caterpillars by (Forbush). 1899. p. 85 .....	A9.6:20
Effect of weather on (Smith). 1895. p. 212 .....	A29.6:23
Farm, value of, on (Samuels). p. 201 .....	A1.1:867
Food habits and distribution of, in parts of Minnesota and Dakota (Bailey). p. 426 .....	A1.1:887
same, p. 426 .....	A5.1:887
Food habits of, circular on .....	A5.4:1
Four common, of farm and garden (Judd). 1895. p. 405 .....	A1.10:895
Grain, birds that injure (Beal). 1897. p. 345 .....	A1.10:897
Land, of New England, oology of some, as a means of identifying injurious or beneficial species (Samuels). p. 386 .....	A1.1:864
Legislation for protection of birds other than game (Palmer)....	A5.3:12
Maryland farm, birds of (Judd). 1902 .....	A5.3:17



<b>Birds—Continued</b>	
Mulberries, birds which feed on (Merriam). p. 285 .....	A1.1:890
same, p. 285 .....	A5.1:890
Nestling, food of (Judd). 1900. p. 411 .....	A1.10:900
North American, geographical distribution and migration of, circular on. 1887 .....	A5.4:8
Noxious, danger of introducing (Palmer). 1898. p. 87 .....	A1.10:898
Observed in southern California, southern Nevada, and parts of Arizona, and Utah, notes on, being report on ornithology of Death Valley expedition of 1891 (Fisher). 1893. p. 7 .....	A5.5:7
Orchard, how birds affect (Beal). 1900. p. 291 .....	A1.10:900
Permits, birds which may be imported without. 1900 .....	A5.4:30
Poisoning, experiments in (Fisher). p. 423 .....	A1.1:887
same, p. 423 .....	A5.1:887
Presence of sarcosporidia in (Stiles). 1893. p. 79 .....	A4.3:3
Protection and importation of, under act of Congress approved May 25, 1900 .....	A5.4:29
Protection of—	
Directory of State officials and organizations for 1901 (Palmer). .....	A5.4:33
same. 1902 .....	A5.4:35
Laws for, in District of Columbia. 1901 .....	A5.4:34
Seed planting by (Barrows). p. 280 .....	A1.1:890
same, p. 280 .....	A5.1:890
Some common, in their relation to agriculture (Beal) .....	A1.9:54
Song, effect of approaching storms upon (Linney). 1898. p. 354 .....	A29.6:26
Stomachs of, directions for collecting. 1891 .....	A5.4:4
same .....	A5.4:12
Tres Marias Islands (Nelson). 1899. p. 21 .....	A5.5:14
Useful and harmful. 1897. p. 670 .....	A1.10:897
Why do birds migrate? (Abbe). 1899. p. 60 .....	A29.6:27
Yukon region, with notes on other species (Bishop). 1900. p. 47 .....	A5.5:19
<i>See also</i> Baltimore oriole—Blackbirds—Blue jay—Bobolink—	
Carrion crows—Cedar bird—Crow blackbirds—Crows—	
Cuckoos—English sparrow—European tree sparrow—Game	
birds—Grackles—Grosbeak—House sparrow—Killdeer	
plover—Kingbird—Marsh hawk—Meadow lark—Oriole—	
Ornithology—Owl—Pheasants—Pigeons—Sparrow—Spar-	
row hawk—Woodpeckers.	
<b>Birds and game:</b>	
Interstate commerce in. 1902 .....	A5.4:38
National and State organizations for protection of—	
1899. p. 713 .....	A1.10:899
1900. p. 664 .....	A1.10:900
1901. p. 634 .....	A1.10:901
State officials and organizations concerned in protection of, directory of. 1900 .....	A5.4:28
State officials concerned with protection of, list of—	
1899. p. 710 .....	A1.10:899
1900. p. 664 .....	A1.10:900
1901. p. 634 .....	A1.10:901
Birkheimer, Wm. E. Signal Service Bureau, sketch of work of, for agriculturist. 1882. p. 110 .....	A1.8:22
Same. 1885. p. 191 .....	A1.7:9
Bishop, Louis Bennett. Yukon region, birds of, with notes on other species. 1900. p. 47 .....	A5.5:19
Bishop, W. H. Horticulturists of agricultural experiment stations, secretary's report of meeting at Columbus, Ohio, June 13, 14, 1889. p. 9 .....	A10.3:3
Bissell, G. W. Iowa College of Agriculture and Mechanic Arts, Ames, Iowa, shopwork instructions at. 1894. p. 65 .....	A10.3:20
Bisulphid. <i>See</i> Carbon bisulphid.	
Bitter rot. <i>See</i> Apple.	
Bitting, Arvill Wayne:	
Indiana, hog cholera and swine plague in. p. 199 .....	A4.1:897
Veterinarian, experiment station, and local veterinarians in the State, desirability of cooperation between. 1898. p. 20 .....	A4.3:22
same, p. 426 .....	A4.1:898

# Index

Classification no.

Bitting, Arvill Wayne—Continued	
Veterinarians, laboratory records for. 1898. p. 18 .....	A4.3:22
Water supply, relation of, to animal diseases. p. 471 .....	A4.1:899
Bixby, William Herbert. Wood-creosote oil. 1887. p. 99 .....	A13.3:1
Same. Reprint. p. 282 .....	A13.3:9
Bjerknes, V. Atmosphere, circulatory movements in, dynamic principle of. 1900. pp. 434, 532 .....	A29.6:28
Black, Samuel E., short biography of (Abbe). 1898. p. 217 .....	A29.6:26
Black alkali. <i>See</i> Sodium carbonate.	
Black flies. <i>See</i> Buffalo gnats.	
Black-head sheep. <i>See</i> Somali.	
Black Hills, South Dakota:	
Evotomys from, description of (Merriam). 1890. p. 119 .....	A5.5:5
Flora of (Rydberg). 1896. p. 463 .....	A6.5:3
Marmot from, description of new (Merriam). 1889. p. 7 .....	A5.5:2
Black Hills Forest Reserve, insect enemies of pine in (Hopkins). 1902 .....	A9.6:32
Black knot of plum and cherry trees (Peck). p. 175 .....	A1.1:872
Same. 1874 (Taylor). p. 12 .....	A27.9:12
Black-quarter. <i>See</i> Blackleg.	
Black River thaw, note on (Abbe). 1900. p. 114 .....	A29.6:28
Black rot. <i>See</i> Cabbage—Grape—Sweet potato.	
Black scale:	
Australian enemies of. 1892. p. 41 .....	A9.7:5
Of California—	
found in South Carolina, note on. 1886. p. 36 .....	A9.3:12
note on. 1886. p. 34 .....	A9.3:12
Black spot of asparagus berries (Fairman). 1889. p. 157 .....	A28.5:5
Blackberry, lecanium infesting, considered identical with <i>L. fitchii</i> (Cockerell). 1894. p. 29 .....	A9.7:7
Blackberry borers, notes on (Smith). 1891. p. 27 .....	A9.7:4
Blackberry rust, perennial mycelium of fungus of (Newcombe). 1891. p. 106 .....	A28.5:6
Blackbirds:	
Depredations of, in northern Iowa and southern Minnesota in fall of 1887 (Fisher). p. 454 .....	A1.1:887
same, p. 454 .....	A5.1:887
Food of (Beal). 1900 .....	A5.3:13
<i>See also</i> Crow blackbird.	
Blackleg or black-quarter:	
Among cattle, letter on (Watts). 1874. p. 157 .....	A27.9:12
Nature, cause, and prevention (Nörsgaard). 1898 .....	A4.4:23
Preventive vaccination against (Nörsgaard). 1897 .....	A4.4:20
same. 1897. p. 7 .....	A4.4:21
Report on (Salmon). p. 84 .....	A4.1:893-4
same, n. d. ....	A4.4:6
Symptoms and treatment. p. 471 .....	A4.1:887-8
United States; distribution of vaccine by Bureau of Animal Industry (Nörsgaard). p. 27 .....	A4.1:898
same, abstract; "Blackleg: its nature, cause, and prevention" (Nörsgaard). 1900 .....	A4.4:31
Utah, vaccination against (Merrill). p. 469 .....	A4.1:899
Vaccine—	
directions for use of (Nörsgaard). 1897 .....	A4.4:21
same. 1900 .....	A4.4:23 <sup>s</sup>
distribution of. 1899. p. 532 .....	A4.1:899
free distribution of (Nörsgaard). p. 35 .....	A4.1:900
Blackwell, Henry B. Beet sugar in Maine, statement concerning. 1883. No. 61. p. 26 .....	A27.9:21
Blackwood, Norman Jerome. Shanghai, meat and milk inspection in. p. 205 .....	A4.1:898
Bladder, human, vinegar eel infection in, case of (Stiles and Frankland). 1902. p. 35 .....	A4.3:35
Blaisdell, F. E. Coleoptera, some species of, observed in San Diego County, Cal., notes on habits of. 1892. p. 33 .....	A9.7:5
B'ake, F. L. Cloud observations at Toronto. 1897. p. 19 .....	A29.6:25



<b>Blandford, Samuel M.:</b>	
Climate of Idaho, some features of. 1901. p. 19.....	A29.6:29
Idaho, water supply of, for season of 1900 as depending on snow-fall. p. 494.....	A29.6:28
<i>See also</i> , as joint author, Pague, Bemmer S.	
<b>Blandford, W. F. H.</b> Scolytidae and their food plants, notes on. 1894. p. 260.....	A9.7:6
<i>See also</i> , as joint author, Kanthack, A. A.	
<b>Blarina</b> , American genera, revision of shrews of (Merriam). 1895. p. 5.....	A5.5:10
<b>Blasdale, Walter C.</b> Chinese vegetable food materials, description of, and their nutritive and economic value. 1899.....	A10.3:68
<b>Blastophaga psenes</b> , first introduction of, into California (Eisen). 1891. p. 128.....	A9.7:4
<b>Blecllynder, A. H.</b> Rhea fiber, information concerning. 1870. p. 227.....	A27.9:8
<b>Blight, George.</b> Guenon system of selecting cattle, value of. 1883. p. 233.....	A1.7:2
<b>Blight, pear-tree</b> , report on (Taylor). 1872. p. 225.....	A27.9:10
<b>Blister beetles</b> , great damage to beans by, note on. 1886. p. 37....	A9.3:12
<b>Blister mite</b> , pear-leaf, report on (Slingerland). 1892. p. 104.....	A9.7:5
<b>Blizzard:</b>	
Note on (Abbe). 1895. p. 465.....	A29.6:23
Origin of word, note on (Abbe). 1898. p. 563.....	A29.6:26
same (Abbe). 1899. p. 18.....	A29.6:27
Sand (Abbe). 1895. p. 381.....	A29.6:23
<b>Blodget, Lorin:</b>	
Forest cultivation on plains, general discussion of. p. 316.....	A1.1:872
Short biography of (Abbe). 1901. p. 174.....	A29.6:29
<b>Blom, Jules:</b>	
Boots and shoes, American, in Denmark. p. 521.....	A4.1:899
Horse meat, American, in Denmark. p. 505.....	A4.1:900
<b>Blood and serum injections</b> in connection with Texas fever investigations, experiment in (Schroeder). p. 43.....	A4.1:899
<i>See also</i> Blood serum.	
<b>Blood horse</b> , essay on (Jackson). 1882. p. 50.....	A1.8:22
<b>Blood louse</b> , observations on cycle of sexual development of (Mokrzetski). 1898. p. 78.....	A9.6:18
<b>Blood poisoning</b> (malignant edema) in sheep and lambs in New Zealand (Gilruth). p. 233.....	A4.1:901
<b>Blood serum</b> , experiments with, as a preventive and cure for Texas fever (Robert). p. 482.....	A4.1:898
<i>See also</i> Blood and serum.	
<b>Blood-vessels diseases:</b>	
Cattle (Harbaugh). p. 77.....	A4.2:C29 <sup>2</sup>
Horses (Trumbower). p. 219.....	A4.2:H78
<b>Blount, A. E.:</b>	
Cereals, improvement of. 1882. p. 104.....	A1.8:22
Wheats, origin and treatment. p. 559.....	A1.1:881-2
<b>Blue Hill meteorological observatory, Milton, Mass.:</b>	
Cloud observations and measurements at (Rotch). 1897. p. 12..	A29.6:25
same (Clayton). 1897. p. 135.....	A29.6:25
Exploration of air with kites at, progress in (Rotch). 1898. p. 355.....	A29.6:26
Kite, high, ascension at (Fergusson). 1896. p. 327.....	A29.6:24
same (Fergusson). 1897. p. 392.....	A29.6:25
Kite experiments at (Fergusson). 1896. p. 323.....	A29.6:24
Note on (Abbe). 1898. p. 214.....	A29.6:26
<b>Blue jay and its food</b> (Beal). 1896. p. 197.....	A1.10:896
<b>Blue Ridge, Southern</b> , northwest gales of (Hawkins). 1899. p. 13..	A29.6:27
<b>Blueberries</b> , improvement of (Smith). 1900. p. 18.....	A1.9:119
<b>Bluegrass seed</b> , Kentucky, harvesting, curing, and cleaning (Pieters and Brown). 1902.....	A19.3:19
<b>Blystone, M. E.</b> Night forecasts, Weather Bureau; is it advisable to distribute by rural free delivery? 1902. p. 191.....	A29.3:31
<b>Blythe, W. T.</b> Weather forecasts, distribution of, methods of saving time in. 1902. p. 203.....	A29.3:31

# Index

Classification no.

Boardman, Samuel L.:	
Climate, soil, physical resources, and agricultural capabilities of Maine, with special reference to occupation of its new lands. 1884 .....	A1.7:4
Corn canning in Maine. 1886. p. 554 .....	A27.9:24
Maine, agriculture of, some outlines of. p. 39 .....	A1.1:862
Nova Scotia and New Brunswick, tidal lands and diked marshes of. 1885. p. 33 .....	A1.7:7
Starch factories in Maine, report on. 1885. No. 19. p. 23.....	A27.9:23
Boardman, Samuel P. Sheep husbandry in the West. p. 286.....	A1.1:862
Boards of health, State, list of. 1898. p. 603 .....	A4.1:898
Same, 1899. p. 530 .....	A4.1:899
Boards of trade that publish commercial news, list of:	
1899. p. 758 .....	A1.10:899
1900. p. 752 .....	A1.10:900
1901. p. 696 .....	A1.10:901
Boat crews. See Harvard and Yale boat crews.	
Bobolink, food of (Beal). 1900.....	A5.3:13
Bödiker, T. German Empire, statistical memoir of. 1874. p. 266.	A27.9:12
Body material, available energy of (Atwater). 1901. p. 112.....	A10.3:99
Boerner, Charles G. Short biography of. 1900. p. 22.....	A29.6:28
Boggs, Edward M. Water rights on Los Angeles River, Cal., study of. 1901. p. 327.....	A10.3:100
Bohemia:	
Hop cultivation in (Fairchild). 1899.....	A6.4:19
Horse-radish culture in (Fairchild). 1899 .....	A6.4:20
Boise area, Idaho, soil survey of (Jensen and Oishausen). p. 421...	A26.5:901 <sup>1</sup>
Boise Valley, Idaho, duty of water as related to irrigation problems of (Ross). 1900. p. 219.....	A10.3:86
Bolivia, agriculture in. 1891. p. 546.....	A27.9:29
Boll worm:	
Chapter on. 1885. p. 355 .....	A8.1:4
Injuring corn in California (Coquillett). 1889. p. 331.....	A9.7:1
Injuring tomatoes, experiments on (Tracy). p. 141.....	A1.1:888
same, p. 141 .....	A9.1:888
Mississippi, observations on (Mullen). 1893. p. 240.....	A9.7:5
Report upon (Johnson)—	
1880. p. 150 .....	A1.1:881-2
1880. p. 150 .....	A9.1:882
1883. p. 53.....	A9.3:1
Boll worm of cotton:	
Progress in supplementary investigation of (Mally)—	
1891 .....	A9.3:24
1892. p. 45 .....	A9.3:26
1893 .....	A9.3:29
Report on. 1879. p. 285 .....	A9.2:C82
same (Jones). 1885. App. p. 17.....	A8.1:4
See also Cotton insects.	
Bolley, Henry L.:	
Cheese-curd inflation; its relation to bacterial flora of foremilk. 1896. p. 78 .....	A10.3:30
Experiment, its conception, and methods of procedure. 1898. p. 47.....	A10.3:49
Bollman, Lewis:	
Hop plant, cultivation of. p. 97.....	A1.1:864
Industrial colleges; nature of education to be given in them; their several kinds of instruction, etc. 1864 .....	A27.2:In2
Silk cultivation, condition of, etc. p. 304 .....	A1.1:872
Sorghum, cultivation of. p. 140.....	A1.1:862
Wheat plant, report on. p. 65 .....	A1.1:862
See also, for reports as statistician, Agriculture Department, 1863 and 1864 .....	A27.1:
Bolton, B. Meade. Swine, epidemic diseases among. p. 135.....	A4.1:889-90
Bombycidae, list of, taken by electric lamps at Poughkeepsie, N. Y. (Dyar). 1891. p. 322 .....	A9.7:3
See also Moths.	

<b>Bond, Edward A.:</b>	
Address of welcome at International Good Roads Congress, held at Buffalo, N. Y., Sept. 16-21, 1901. p. 9 .....	A22.3:21
Highways, bonding system for improvement of. p. 38 .....	A22.3:22
State aid to good roads in New York. 1901. p. 20 .....	A22.3:21
<b>Bond, Frank. Irrigation of rice on uplands of Louisiana and Texas.</b>	
1902. p. 11 .....	A10.3:113
<b>Bond, Fred, and Wilson, James Maxwell. Irrigation system of Wyoming. 1901. p. 47 .....</b>	
<b>Bond-aided and land-grant railroads, alphabetical list of, in U. S. 1902 .....</b>	
<b>Bone fertilizers. See Fertilizers.</b>	
<b>Bones:</b>	
Diseases and accidents to, of cattle (Atkinson). p. 281 .....	A4.2:C29 <sup>s</sup>
Used as fertilizers, new process for dissolving. 1866. p. 337 .....	A27.9:4
Bones and bone ash, export of, from Uruguay (Swalm). p. 519 .....	A4.1:900
<b>Bonsteel, Jay Allan:</b>	
Soil survey of Kent County, Md. p. 173 .....	A26.5:900 <sup>1</sup>
same, St. Marys County, Md. p. 125 .....	A26.5:900 <sup>1</sup>
<i>See also</i> , as joint author, Dorsey, Clarence Wilbur.	
<b>Bonsteel, Jay Allan, and Burke, R. T. Avon. Soil survey of Calvert County, Md. p. 147 .....</b>	
<b>Bonsteel, Jay Allan, and Taylor, F. W. Soil survey of Salem area, New Jersey. p. 125 .....</b>	
<b>Bonsteel, Jay Allan, and party:</b>	
Soil survey of Prince George County, Md. p. 173 .....	A26.5:901 <sup>1</sup>
Soil survey of Yazoo area, Mississippi. p. 359 .....	A26.5:901 <sup>1</sup>
Boots and shoes, American, in Denmark (Blom). p. 521 .....	A4.1:899.
Borax as a preservative of butter, letter relating to (Crosby). p. 576.	A1.1:878
<b>Bordeaux mixture:</b>	
Chemistry, physical properties, and toxic effects on fungi and algae (Swingle). 1896 .....	A28.3:9
Fungicide (Fairchild). 1894 .....	A28.3:6
Improved method of making (Swingle). 1891. p. 365 .....	A28.5:7
<b>Börger, C. Polar expeditions, international, 1882-83. 1895. p. 469 .....</b>	
<b>Borstel, E. von. Date, cultivation of. 1883. p. 25 .....</b>	
<b>Bos, J. Ritzema:</b>	
Aphelenchus olesistus, a nematoid worm, cause of leaf sickness in Begonia and Asplenium. 1893. p. 161 .....	A9.7:6
Phytomyza affinis as cause of decay in clematis. 1893. p. 92 .....	A9.7:6
<b>Bosnia and Herzegovina, Austria-Hungary, agricultural development in. 1894. p. 197 .....</b>	
<b>Bosse, Eugene. Flax culture in the Northwest, investigation of, in 1891. 1892. p. 40 .....</b>	
<b>Same, in Wisconsin and Minnesota. 1892. p. 43 .....</b>	
<b>Bossert, Frederick. Manufacture of grape, blackberry, and other fruit wines, on Gall's method, with few remarks on cultivation of grapevine in Germany, France, and U. S. p. 156 ..</b>	
<b>Boston, Mass.:</b>	
Cattle, sheep, and other ruminants, and swine, prohibition of exportation of. 1902 .....	A4.5:100
Exportation of Canadian cattle from (Allerton) .....	A1.2:C29 <sup>s</sup>
Live stock at, 1866-68. p. 22 .....	A27.9:7
Milk supply of other New England cities, and (Whitaker). 1898.	A4.3:20
Precipitation at, 1889-91. p. 108 .....	A29.6:20
Weather forecast district, report of, monthly, July, Oct.-Dec., 1901 (Smith) .....	A29.6:29
same, Jan.-Oct., 1902 (Smith) .....	A29.6:30
<b>Bot:</b>	
<b>Cottontail. Further notes on, with breeding and identification of fly (Townsend). 1893. p. 317 .....</b>	
<b>Man-infesting, abstract of paper on (Matas). 1888. p. 76 .....</b>	
<b>Botanical collectors, instructions to (Vasey) .....</b>	
<b>Botanical considerations of ramie question in France. 1892. p. 97 ..</b>	
<b>Same, 2d ed. p. 97 .....</b>	
<b>Botanical Exchange Club, rules for (Vasey) .....</b>	

# Index

	Classification no.
Botanical explorations in East Tennessee (Parry). 1870. p. 221 ...	A27.9:8
Botanical history of sorghum (Peck). p. 299.....	A1.1:865
Botanical instruction, importance of mycophagy in a course of (Starnes). 1898. p. 75.....	A10.3:49
Botanical notes (Vasey):	
1872. pp. 222, 313, 381, 446, 505.....	A27.9:10
1873. pp. 34, 115, 171, 247, 354, 503, 585.....	A27.9:11
1874. pp. 50, 151, 330, 379, 438, 513 .....	A27.9:12
1875. pp. 126, 178, 313 .....	A27.9:13
Botanical survey:	
Alaska, 1898 (Evans). p. 48.....	A10.3:62
Dismal Swamp region (Kearney). 1901. p. 321 .....	A6.5:5
Botanists at agricultural experiment stations in U. S.:	
Function of (Stone). 1901. p. 138.....	A10.3:99
List of, with outline of work in botany at the several stations. 1890 .....	A10.3:6
Botany:	
Abstracts of reports of agricultural experiment stations on. 1889-1902 .....	A10.6:
Agricultural, review of publications on, issued in France during 1896 (Gain). 1897. p. 841, 940 .....	A10.6:8
Cotton (Evans). 1896. p. 67.....	A10.3:33
Death Valley Expedition (Coville). 1893.....	A6.5:4
Investigations in, circular regarding. 1890 .....	A10.4:15
Outline of work in, at the several Agricultural Experiment Sta- tions. 1890 .....	A10.3:6
Publications on, in Agriculture Department library. 1902.....	A17.3:42
Text-books on (Coville). 1899. p. 154.....	A29.6:27
Yakutat Bay, Alaska (Coville and Funston). 1895. p. 325 .....	A6.5:3
<i>See also</i> Agriculture—Plants—headings beginning Botanical.	
Botany and agriculture of Rocky Mountain basins (Thompson): p. 125 .....	A1.1:866
Botany committee of Association of American Agricultural Colleges and Experiment Stations, report of. 1890. p. 128.....	A10.5:3
Botany Division, Agriculture Department:	A6.
Cooperative branch stations in South, report of superintendent. p. 209.....	A1.1:892
Publications of, list of (Coville).....	A6.4:30
Record of some work of, including extracts from correspondence and other communications (Vasey). 1889. p. 7.....	A6.3:8
Work of, for farmer (Coville). p. 90 .....	A1.10:897
<i>See also</i> Vegetable Pathology section.	
Botany section, Association of American Agricultural Colleges and Experiment Stations, report of:	
1890. p. 128.....	A10.5:3
1891. pp. 17, 101.....	A10.3:7
1892. pp. 33, 168.....	A10.3:16
<i>See also</i> Horticulture and Botany section.	
Botfly, emasculating, report on. 1889. p. 214 .....	A9.7:1
Bots in horses. 1866. p. 436 .....	A27.9:4
"Bottom disease" among horses of South Dakota (Schroeder). p. 371.	A4.1:891-2
Boucart, Robert. Milk, analysis of, with view to determining its adulterations. 1889. p. 167.....	A7.3:24
Bouley, —. Pork, salted, of American origin, importation of, into France. 1884. p. 186 .....	A4.3:30
Bounties, extermination of noxious animals by (Palmer). 1896. p. 55 .....	A1.10:896
Bourbon, island of, probable origin of <i>Icerya</i> on (Riley). 1887. p. 27.	A9.3:15
Bourne, John H. Farm accounts, system of. p. 502 .....	A1.1:865
Bovine lung plague. <i>See</i> Bovine tuberculosis—Pleuro-pneumonia.	
Bovine tuberculosis:	
Bacillus, virulence of, for monkeys (Schweinitz and Schroeder). 1902. p. 579 .....	A4.1:901
Investigations concerning, with special reference to diagnosis and prevention. 1894.....	A4.3:7
Legislation with reference to (Salmon). 1901 .....	A4.3:28
Relation of, to public health (Salmon). 1901 .....	A4.3:33

	<b>Index</b> Classification no.
<b>Bovine tuberculosis—Continued</b>	
Soldiers' Home herd of 60 cattle, clinical notes on (Kilborne and Schroeder). p. 7 .....	A4.3:7
same, pathological notes (Smith). p. 26 .....	A4.3:7
Studies in, with special reference to prevention (Smith). 1894. p. 88 .....	A4.3:7
<i>See also</i> Pleuro-pneumonia—Tuberculosis.	
<b>Bovines, contagious pleuro-pneumonia and infectious bronco-pneumonia of (Fleming). p. 87 .....</b>	A1.1:891
Same, p. 14 .....	A4.1:891-2
<i>See also</i> Cattle.	
<b>Bowhill, Thomas:</b>	
Anthrax and Southern cattle fever among California cattle. p. 443 .....	A4.1:887-8
California cattle, mortality among, autopsies to determine causes of. p. 453 .....	A4.1:887-8
<b>Bowie, Walter W. W. Tobacco, culture and management of. p. 179.</b>	A1.1:867
<b>Bowstring hemp, results of recent investigations relating to (Dodge). 1893. p. 52 .....</b>	A11.5:5
<b>Boxed or turpentine timber:</b>	
Field report on (Roth). 1893. p. 32 .....	A13.3:8
Strength of (Fernow) .....	A13.4:8
<b>Box-elder plant bug, circular relative to (Howard). 1898 .....</b>	A9.5:28
<b>Boyer, H. B.:</b>	
Atmospheric circulation in tropical cyclones, as shown by movements of clouds. 1896 .....	A29.2:At6 <sup>1</sup>
Weather forecasts and public. 1902. p. 151 .....	A29.3:31
Wind direction, some observations of, at different altitudes around West India cyclones. 1892. p. 50 .....	A29.6:20
<b>Boyle, James. Liverpool, trade of, with United States. 1900. p. 517 .....</b>	A4.1:899
<b>Boynton, H. R. Waterspouts at Key West, Fla. 1899. p. 351....</b>	A29.6:27
<b>Boynton, Henry. Spanish merinos and their management. p. 196.</b>	A1.1:864
<b>Bozarth, John. Sorghum sugar experiments at Cedar Falls, Iowa. 1889. p. 57 .....</b>	A7.3:26
<b>Brackett, Gustavus Benson:</b>	
Apple, and how to grow it. 1900 .....	A1.9:113
Apple orcharding, commercial. 1901. p. 593 .....	A1.10:901
Fruits, utilizing surplus. 1898. p. 309 .....	A1.10:898
Pomology Division, Agriculture Department, work of, for farmer. 1897. p. 111 .....	A1.10:897
<i>See also</i> , for reports as pomologist, Pomology Division, Agriculture Department. 1897-99, 1901 .....	A20.1:
<b>Braconidae, West Virginia, some bred (Hopkins). 1892. p. 256 ...</b>	A9.7:4
<b>Bradford, L. J.:</b>	
Hemp culture. p. 91 .....	A1.1:863
Tobacco, culture and management of. p. 87 .....	A1.1:863
same. 1864. No. 1. p. 26 .....	A27.9:2
<b>Bradley, J. N.:</b>	
Cattle interests west of Mississippi River. p. 424 .....	A4.1:885
Swine and fowl industry of Missouri and annual loss by disease. p. 418 .....	A4.1:885
<b>Braidentown, Fla., remarkable aurora at, Nov. 18, 1899 (Ten Broeck). p. 582 .....</b>	A29.6:27
<b>Brainerd, Erastus. Agricultural possibilities of Yukon Valley, Alaska. p. 276 .....</b>	A10.1 <sup>1</sup> :901
<b>Brainerd, J. Inventions, American, for cultivation by steam, history of. p. 253 .....</b>	A1.1:867
<b>Branch, T. P. Road construction. 1902. p. 44 .....</b>	A22.3:23
<b>Brand, Albert. Electric signal apparatus, Weather Bureau station, Atlantic City, N. J. 1898. p. 405 .....</b>	A29.6:26
<b>Brandenburg, Frederick H.:</b>	
Colorado, water supply of, for season of 1900, as depending on snowfall. p. 493 .....	A29.6:28
Denver weather forecast district, monthly reports of, July, Sept.-Dec., 1901 .....	A29.6:29
same, Jan.-Oct., 1902 .....	A29.6:30

# Index

## Classification no.

<b>Brandenburg, Frederick H.—Continued</b>	
Northers, cold waves, and heavy snows, possibility of giving warnings of, to stock-raising interests 48 hours in advance.	
1899. p. 33 .....	A29.3:24
Weather and live-stock industry, report on. 1900. p. 588.....	A29.6:27
Weather types, corresponding, facilities for systematic study of.	
1901. p. 546 .....	A29.6:29
same. 1902. p. 136 .....	A29.3:31
Brandies, California wines and (Hilgard). 1882. p. 109.....	A1.8:20
<b>Branner, John Casper:</b>	
Cotton caterpillars in Brazil. 1885. App. p. 49.....	A8.1:4
Cotton in Empire of Brazil. 1885.....	A1.7:8
Insects injurious to cotton, orange, and sugar cane in Brazil, preliminary report of observations upon. 1884. p. 63 .....	A9.3:4
Road-making materials in Arkansas. 1894 .....	A22.3:4
Brassica, seed coats of certain species of (Pieters and Charles). 1901.	A6.3:29
<b>Brazil:</b>	
Agriculture in. 1891. p. 196 .....	A27.9:29
Coffee of. 1876. p. 275.....	A27.9:14
Cotton caterpillars in (Branner). 1885. App. p. 49.....	A8.1:4
Cotton in; antiquity, methods, and extent of cultivation, etc. (Branner). 1885 .....	A1.7:8
Insects injurious to cotton, orange, and sugar cane in, preliminary report of observations upon (Branner). 1884. p. 63.....	A9.3:4
Statistics of, 1876. p. 482.....	A27.9:14
<b>Brazos River, Tex.:</b>	
Flood bulletin. July 15, 1899. map.....	A29.2:B73
Flood of June-July, 1899—	
effects upon agriculture of submerged region (Holmes) .....	A27.4:10
special report on, with notes of previous overflows of river (Cline). p. 295 .....	A29.6:27
Valley of, floods in, April 27 to May 17, 1900, special report on; also freshets in other streams (Cline). p. 198 .....	A29.6:28
<b>Brazos Santiago. See Rio Grande region, Tex.</b>	
<b>Bread:</b>	
Carbohydrates of (Stone). 1896.....	A10.3:34
Digestibility and nutritive value of, report of investigations on (Woods and Merrill). 1900.....	A10.3:85
Bread and meat consumption in Missouri, data relating to (Gibson and others). 1896.....	A10.3:31
<b>Bread making:</b>	
At University of Minnesota, studies on, in 1897 and 1898 (Snyder). p. 7 .....	A10.3:67
same, 1899 and 1900 (Snyder) .....	A10.3:101
Experiments in, 1883. No. 3. p. 30.....	A27.9:21
Losses in (Voorhees). 1899. p. 37.....	A10.3:67
Principles of (Atwater). 1900.....	A1.9:112
Skim milk in (Langworthy). 1900. p. 16 .....	A1.9:114
Studies on. 1899 .....	A10.3:67
<b>Breadstuffs:</b>	
American, foreign markets for. 1883. p. 4. No. 4.....	A27.9:1
British imports of, 1874-75. p. 460.....	A27.9:13
English imports of, Jan. and Feb., 1870-71. p. 143.....	A27.9:9
Exports of, from U. S., Feb.-May, 1867. p. 248.....	A27.9:5
Imports of, into Great Britain, 1863-64. No. 1. p. 39.....	A27.9:3
Breckons, Joseph Allison. Bear River, interstate water rights in. 1899. p. 26.....	A10.3:70
Breed, Daniel. Insect destruction, recent inventions for. p. 323...	A1.1:876
Breed, (Miss) S. Evelyn. Teaching domestic science in rural districts. 1902. p. 91.....	A10.3:120
Breeder, work of, in improving live stock (Clay). 1899. p. 627....	A1.10:899
Breeders, State associations of, list of. 1900. p. 653.....	A1.10:900
Same. 1901. p. 628.....	A1.10:901
<b>Breeding:</b>	
Ages and periods important in. 1900. p. 740 .....	A1.10:900
Animals imported for. 1896. p. 243 .....	A4.1:897
Physiology of (Goodale). p. 222 .....	A1.1:862



	<b>Index</b> Classification no.
<b>Breeding—Continued</b>	
Suggested experiments in (Brewer). 1893. p. 162 .....	A10.3:16
same (Brewer). 1893. p. 458.....	A10.6:4
<i>See also</i> Animal—Plant—Stock.	
Brefeld, Oskar. Smut fungi and smut diseases, recent investigations of. 1891. pp. 1, 59, 153 .....	A28.5:6
Brendle, A. S. Weather as a topic of conversation. 1899. p. 160..	A29.3:24
Brewer, I. N. Climate in Philippines, notes on. 1900. p. 102 ....	A29.6:28
Brewer, W. H. Rainfall and charts of rainfall. 1902. p. 229 .....	A29.6:30
Brewer, William H. Breeding, suggested experiments in. 1893. p. 162.....	A10.3:16
Same. 1893. p. 458.....	A10.6:4
Brewster, James N. Convict labor, plan for use of, on roads. 1895. p. 7.	A22.3:16
Brick paving for country roads. 1896.....	A22.4:25
Brick wheel-track roads. <i>See</i> Roads.	
Bridge and trestle timbers, strength of, report of committee of American International Association of Railway Superintendents of Bridges and Buildings on. 1895. p. 41 .....	A13.3:12
Bridges, country road (Wentworth). 1895. p. 48.....,.....	A22.3:11
<i>See also</i> Timber trestle bridges.	
Bridges and buildings. <i>See</i> Railway Superintendents of Bridges and Buildings, American International Association of.	
<b>Briggs, Lyman James:</b>	
Alkali soils, mechanical analysis as applied to, some necessary modifications in methods of. 1900. p. 173.....	A1.8:64
Clay, suspended, filtration of, from soil solutions. 1902. p. 31..	A26.3:19
Electrical instruments for determining moisture, temperature, and soluble salt content of soils. 1899.....	A26.3:15
Ground temperature observations at St. Ignatius College, Cleveland, Ohio. 1902. p. 301.....	A29.6:30
Salts as influencing rate of evaporation of water from soils. 1900, p. 184.....	A1.8:64
Soil moisture, mechanics of. 1897 .....	A26.3:10
Soils, physical properties of—	
Investigations on. p. 413 .....	A26.5:900 <sup>1</sup>
Objects and methods of investigating certain. 1900. p. 397 ..	A1.10:900
Water, movement and retention of, in soils. p. 399.....	A1.10:898
<i>See also</i> , as joint author, Cameron, Frank Kenneth—Whitney, Milton.	
<b>Briggs, Lyman James, and Lapham, Macy H.:</b>	
Salts, dissolved, influence of, on capillary rise of soil waters. 1902. p. 5 .....	A26.3:19
Water, capillary movement of, in dry and moist soils. 1902. p. 19.	A26.3:19
Brigham, Joseph Henry. Government aid in highway improvement. 1902. p. 33 .....	A22.3:25
<i>See also</i> , for reports as Assistant Secretary of Agriculture Department, in charge of seed distribution. 1898-1900.....	A24.5:
Brill, G. D. Chinese incubators. p. 247.....	A4.1:900
<b>Brillouin, Marcel:</b>	
Atmosphere, general circulation of, original memoir on. 1901. p. 300 .....	A29.6:29
Atmospheric electricity: its origin, variations, and perturbations. 1897. p. 440 .....	A29.6:25
Winds and clouds, report on. 1897. p. 437.....	A29.6:25
<b>Bristol, England:</b>	
Butter markets (Ashby). p. 210 .....	A4.1:899
Egg trade. p. 335 .....	A4.1:899
British. <i>See</i> Great Britain.	
British America. <i>See</i> Canada.	
British Association, Belfast, 1902, address on meteorology at (Schuster). 1902. p. 448 .....	A29.6:30
British-Canadian cattle trade, decrease in (Beutelspacher). p. 515..	A4.1:899
<b>British Columbia:</b>	
Deer skins from, exports of (Smith). p. 519 .....	A4.1:900
Legislation against injurious insects; compilation of laws and regulations in (Howard). 1895.....	A9.3:33
<i>See also</i> Queen Charlotte Islands.	



# Index

Classification no.

British India. <i>See</i> India.	
British West Indies. <i>See</i> Trinidad — West Indies.	
Britton, W. E.:	
Nursery inspection in Connecticut. 1899. p. 131.....	A10.3:65
San Jose scale in Connecticut. 1898. p. 81.....	A9.6:17
Trees, banding of, to prevent injury by fall cankerworm, obser- vations on. 1901. p. 160.....	A10.3:99
Vegetation house arranged for pot experiments. 1901. p. 152..	A10.3:99
Brokers. <i>See</i> Produce brokers.	
Brome grass:	
Beardless, seed of (Pieters). 1900.....	A6.4:25
Hungarian, circular on (Scribner). 1894.....	A6.4:1
Smooth, circular on (Kennedy). 1899.....	A3.4:18
<i>See also</i> Chess.	
Bromin. <i>See</i> Proteid matters.	
Bromus, North American species of, occurring north of Mexico, revision of (Shear). 1900.....	A3.3:23
Bronchitis:	
Cattle (Williams). p. 603.....	A1.1:880
Parasitic, among calves (Trumbower). p. 465.....	A4.1:884
Verminous, in calves and lambs, and its treatment by tracheal injections. p. 554.....	A1.1:885
same, p. 278.....	A4.1:885
Bronson, B. H. Weather observers, voluntary, should not a book be provided for keeping record of issue of instruments and flags to? 1899. p. 126.....	A29.3:24
Brontometer, use of (Symons). 1901. p. 463.....	A29.6:29
Bronze apple-tree weevil (Chittenden). 1900. p. 37.....	A9.6:22
Brooklyn, N. Y.:	
Animals in, contagious diseases of, preliminary report of veter- inary inspectors in investigation of (McLean and others). 1884. p. 19.....	A1.7:6
Leopard moth in, ravages of (Pike). 1892. p. 317.....	A9.7:4
Museum of meteorology at, notes on (Abbe). 1900. p. 163.....	A29.6:28
Brooks, Wm. P. Japan, migratory locust in, 1883. App., p. 59....	A8.1:3
Broom-corn:	
Cultivation of. 1876. p. 56.....	A27.9:14
Culture of, in New York State. 1867. p. 286.....	A27.9:5
Reports on.....	A10.4:28
Broun, William L. Roy. Address of, as president Association of American Agricultural Colleges and Experiment Stations, before sixth annual convention. 1893. p. 58.....	A10.3:16
Same (extract).....	A10.2:C43 <sup>4</sup>
Broun's law of winds and currents, notes on (Abbe). 1898. p. 264.	A29.6:26
Brown, Edgar. <i>See</i> , as joint author, Pieters, Adrian John.	
Brown, J. P. Forests of Washington Territory. 1884. p. 388.....	A13.5:4
Brown, James H. Adulteration of dairy products. 1893. p. 54...	A7.3:41
Brown, Ryland T.:	
Agriculture, organization of. 1882. p. 108.....	A1.8:22
Chemical memoranda, monthly, Feb.-Dec., 1872.....	A27.9:10
[The more important articles are indexed under their various subjects.]	
<i>See also</i> , for reports as Chemist, Chemistry Bureau, Agriculture Department. 1871, 1872.....	A7.1:
Brown, Simon. Farmers' gardens. p. 337.....	A1.1:863
Brown, Simon, and Reynolds, Joseph. Manures and their applica- tion. p. 368.....	A1.1:865
Brown, W. V. Weather maps, proposed classification and index of, as aid in weather forecasting. 1901. p. 547.....	A29.6:29
Brown coal and wood char in filtration of cane juices and sirups (Thompson). p. 268.....	A1.1:887
Same, 1889. p. 99.....	A7.3:17
Brown rot. <i>See</i> Grape.	
Brown-tail moth:	
Massachusetts, report on (Kirkland). 1900. p. 75.....	A9.6:26
Report on (Fernald). 1898. p. 24.....	A9.6:17
Browne, C. A., jr. Starch, estimation of, report on. 1899. p. 92..	A7.3:57

	<b>Index</b>
	<b>Classification no.</b>
Browne, Orris A. Address of, before convention of National League for Good Roads, Washington. 1893. p. 24 .....	A10.3:14
Bruce, Eugene S. See, as joint author, Hosmer, Ralph Sheldon .....	
Bruchus, food-plants of North American species of. 1893. p. 165 ..	A9.7:5
Bruette, William A. Horses, export of, from Chicago market. 1897. p. 84 .....	A1.2:H78
Bruhl, Louis H. Catania, Italy, cost of hauling farm products over wagon roads at, p. 10.....	A22.4:27
Bruner, Lawrence:	
Beet insects, notes on. 1891. p. 229 .....	A9.7:3
Cicindela limbata, report on. 1889. p. 144 .....	A9.7:2
Grasshopper report—	
1895. p. 31 .....	A9.6:7
1896. p. 36 .....	A9.6:7
1901. p. 39 .....	A9.6:38
Grasshoppers, outbreak of, in Idaho, report on. 1890. p. 135 ..	A9.7:3
Insect injuries in Nebraska in—	
1884. p. 398 .....	A1.1:884
1887. p. 164 .....	A1.1:887
1887. p. 33 .....	A9.3:13
1888. p. 139 .....	A1.1:888
1888. p. 139 .....	A9.1:888
1889. p. 95 .....	A9.3:22
1890. p. 9 .....	A9.3:23
1891. p. 9 .....	A9.3:26
1892. p. 34 .....	A9.3:30
1893. p. 9 .....	A9.3:32
Locusts, destructive—	
found in America, north of Mexico, in 1891, reports on. p. 9.	A9.3:27
Same. 1892 .....	A9.3:28
killing, with fungous diseases. 1902. p. 50 .....	A9.6:38
North America, with notes on occurrences in 1891. 1891. p. 18.	A9.7:4
Orthoptera from Death Valley expedition. 1893. p. 266.....	A5.5:7
Pezotettix, new species of. 1894. p. 41.....	A9.7:7
Phosphorescent myriopods, report on. 1891. p. 319.....	A9.7:3
Rocky Mountain locust, observations on—	
1882. p. 7 .....	A9.3:2
1883. p. 51 .....	A9.3:4
1885. p. 303 .....	A1.1:885
1888. p. 65 .....	A9.7:1
Texas, locusts in, during spring of 1886. 1887. p. 9.....	A9.3:13
Brunswick, Germany, cost of hauling farm products over wagon roads at (Tingle). p. 7 .....	A22.4:27
Brussels, Belgium:	
Dead animals in, disposition of (Roosevelt). p. 354.....	A4.1:899
Importation of American horses into (Langhorne). 1897. p. 26.	A1.2:H78
Brussels, International Veterinary Congress, report of (Law). p. 321.	A4.1:884
Same, 1884. p. 122 .....	A4.2:An5
Bryan, Enoch A.:	
Agriculture Department and experiment stations, cooperative work between, report of committee on. 1901. p. 59.....	A10.3:99
Education, theory of higher, some recent changes in. 1899. p. 87.	A10.3:65
Bryan farm. See Maryland farm.	
Bryant, Arthur Peyton. Dietary studies in U. S., some results of. 1898. p. 439 .....	A1.10:898
See also, as collaborator, Atwater, Wilbur Olin; as joint author, Atwater, Wilbur Olin—Frisby, Almah J.	
Bryobia, species of, infesting dwellings, notes on (Webster). 1889. p. 277 .....	A9.7:1
Bucculatrix canadensisella, occurrence of, on birches in Rhode Island (Packard). 1892. p. 14 .....	A9.7:5
Buchan, Alexander. Rainfall and charts of rainfall. 1902. p. 242.	A29.6:30
Buchanan, William Insko. Great Britain's purchases of cavalry horses in Argentina. 1898. p. 22 .....	A1.2:H78
Buck, Norman. Minnesota flour, improved. p. 388.....	A1.1:875
Buckham, M. H. Morrill, Justin Smith, remarks on resolutions of respect for. 1900. p. 30.....	A10.3:76

# Index

Classification no.

Buckley, S. B. <i>See</i> Merrill, Elmer D.	
Buckwheat. <i>See</i> Crops, principal.	
Budd, James H. California, road improvement in, extract from governor's message. p. 1 .....	A22.4:33
Buenos Ayres, Argentina, gale at (Abbe). 1895. p. 381 .....	A29.6:23
Buffalo, N. Y., and vicinity, export of horses from (Hinkley). 1898. p. 88 .....	A1.2:H78
Buffalo, N. Y., International Good Roads Congress, Sept. 16-21, 1901:	
Letter of invitation to, inclosing official call. 1901 .....	A22.2:B86
Proceedings of. 1901 .....	A22.3:21
Resolutions adopted by. 1901. p. 70 .....	A22.3:21
<i>See also</i> Moore, W. H.	
Buffalo, N. Y., Pan-American Exposition, 1901:	
Canadian cattle for exhibition at, order providing for importation of. 1900 .....	A4.5:65
Chemistry Bureau, exhibit at (Ewell and others). 1901 .....	A7.3:63
Weather Bureau exhibit at (Maring). 1901. p. 259 .....	A29.6:29
Weather map of .....	A29.2:P19
Buffalo, destruction of, 1873. p. 41 .....	A27.9:11
Buffalo-gnats or black-flies:	
Notes on Simulium or common, at Ithaca, N. Y. (Howard). 1888. p. 99 .....	A9.7:1
Report on (Webster). 1887. p. 29 .....	A9.3:14
same (Marlatt). 1889. p. 7 .....	A9.7:2
same (Coquillett). 1898. p. 66 .....	A9.6:10
Simulium or, infesting country adjacent to Mississippi River (Webster). p. 456 .....	A4.1:887-8
Buffalo moth. <i>See</i> Carpet beetle.	
Buffalo tree-hopper:	
Circular relative to (Marlatt). 1897 .....	A9.5:23
Report on (Marlatt). 1894. p. 8 .....	A9.7:7
Buffum, B. C.:	
Alkali and irrigation, recent investigations by Wyoming experiment station in. 1900. p. 69 .....	A10.3:76
Irrigation in Wyoming, use of water in, and its relation to ownership and distribution of natural supply. 1900 .....	A10.3:81
Bugbee, E. L. Seacoast telegraph lines, instructions to operators on. 1892 .....	A29.12:Sel
Buhach, production and manufacture of (Coquillett). 1886. p. 7 ..	A9.3:12
Buildings:	
Earthquake proof (Abbe). 1897. p. 309 .....	A29.6:25
same (Abbe). 1901. p. 507 .....	A29.6:29
Humidity, relative, inside and outside of (Henry). 1896. p. 456. <i>See also</i> Churches.	A29.6:24
Bulbs, etc., distributed from U. S. propagating garden, catalogue of (Saunders). 1862 .....	A1.8:2
Bulk fermentation of Connecticut tobacco (Floyd). n. d .....	A26.4:5
Bullets, penetration of snow by (Abbe). 1895. p. 424 .....	A29.6:23
Bünzli, J. H. Potato blight, combating, report on. 1891. p. 78...	A28.5:6
Bur, or globe, artichokes, circular on (Swingle and Fairchild). 1899.	A6.4:22
Burchard, Oscar. Seed investigation, object and methods of, and establishment of seed-control stations. 1893. pp. 793, 882...	A10.6:4
Burgess, Albert F.:	
Coccinellid, abnormal, report on. 1898. p. 59 .....	A9.6:17
San José scale, lime, sulphur, and salt and resin washes for, in Ohio, notes on use of. 1902. p. 33 .....	A9.6:37
Tan-bark beetle, destructive, report on. 1899. p. 107 .....	A9.6:20
<i>See also</i> , as joint author, Webster, Francis M.	
Burgess, Edward. <i>See</i> , as joint author, Minot, Charles Sedgwick.	
Burke, Frank. Short biography of (Abbe). 1898. p. 68 .....	A29.6:26
Burke, R. T. Avon. <i>See</i> , as joint author, Bonsteel, Jay Allan.	
Burke, R. T. Avon, and Marean, Herbert W.:	
Cobb County, Ga., soil survey of. p. 317 .....	A26.5:901 <sup>1</sup>
Westfield area, New York, soil survey of. p. 75 .....	A26.5:901 <sup>1</sup>
Burkett, Charles M. [William]. Pig feeding in New Hampshire, experiments in. p. 465 .....	A4.1:899
Burley tobacco, its growing and curing (Scovell). 1901. p. 106...	A10.3:99

	<b>Index</b>
	<b>Classification no.</b>
Burma, India, dust storms in, and elsewhere, notes on (Abbe). 1901. p. 175 .....	A29.6:29
Burnett, E. A. See, as joint author, Chilcott, Ellery Channing.	
Burrill, T. J. See, as joint author, Shakespeare, Edward Orum.	
Burrough, Edward: Address of, before national road conference, July, 1894. pp. 6, 10..	A22.3:10
Road building, State aid to, in New Jersey. 1894.....	A22.3:9
Burrows, Alvin T.: Chinook winds. 1901. p. 555 .....	A1.10:901
Hot waves: conditions which produce them, and their effect on agriculture. 1900. p. 325 .....	A1.10:900
Bursattee, disease of horse in India. See Leeches.	
Burtis, F. C. See, as joint author, Cottrell, H. M.	
Burton, W. M. See, as joint author, Morse, H. N.	
Busck, August: Cocoanut palms, diseased, in Cuba, report of investigation of. 1902. p. 20 .....	A9.6:38
Mushrooms, enemies of, and experiments with remedies, note on. 1902. p. 32 .....	A9.6:38
Puerto Rico, brief trip to, in January and February, 1899, notes on. 1900. p. 88 .....	A9.6:22
See also, as collector, Pergande, Theodore, and Cockrell, Thomas Dru Alison.	
Bushel, weights of. 1901. p. 786 .....	A1.10:901
Bushnell, Asa S. Ohio, road improvement in, extract from gover- nor's message. p. 7.....	A22.4:33
Butler, Amos W. Periodical cicada in southeastern Indiana. 1886. p. 24 .....	A9.3:12
Butler, William E. Short biography of (Abbe). 1898. p. 68.....	A29.6:26
Butler County, Kansas, southern cattle fever in, outbreak of 1883 (Trumbower). p. 420 .....	A4.1:884
Same, 1884. p. 239 .....	A4.2:An5
Butter: American— analyses of, averages of (Richards). 1886. p. 23.....	A7.3:16
in Japan (Ruffin). p. 521 .....	A4.1:898
Analysis of, method for (Morse and Burton). 1890. p. 99.....	A7.3:24
Artificial, methods of distinguishing (Besana). 1889. p. 107...	A7.3:24
Borax as a preservative of, letter relating to (Crosby). p. 576....	A1.1:878
Commercial butter cultures used in connection with pasteurized cream (Allen). 1898. p. 21.....	A1.9:103
Composition and analysis of, abstracts of data relating to. 1889. p. 99.....	A7.3:24
Composition of— from Chicago dairy show, December, 1889 (Morrow). p. 188..	A7.1:889
influence of food on (Von Lookren). 1890. p. 141 .....	A7.3:24
variations in (Babcock). 1886. p. 23 .....	A7.3:16
Dubernard method for examination of (Sartori). 1890. p. 103..	A7.3:24
Experimental exports of, 1897 (Alvord). p. 83.....	A4.1:888
same, 1898-99 (Alvord). p. 154 .....	A4.1:899
Exported, chemical analyses of. p. 240.....	A4.1:899
Fatty volatile acids of, contribution to study of (Spallanzani). 1890. p. 104 .....	A7.3:24
Foreign and homemade, scores of, in competition. 1899. p. 226.	A4.1:899
Foreign made, analyses of. p. 242.....	A4.1:899
Irish, trade in. 1865-67. p. 379 .....	A27.9:5
Market quotations on, 1897 and 1899. p. 216.....	A4.1:899
Markets for. See Ashby, Newton B.	
Melting point and chemical composition of, influence of different foods upon. 1890. p. 141 .....	A7.3:24
Microscopic observations, fats and (Taylor). 1884.....	A1.8:34
Mixed, application of methods Reichert, Meissl, and Wollny to (Besana). 1890. p. 105.....	A7.3:24
Nostrums for increasing yield of (Wiley). 1893 .....	A1.9:12
Paraguay (Ruffin). p. 521.....	A4.1:898
Pasteurized and raw cream, comparison of. 1899. p. 233.....	A4.1:899
Philadelphia, how made. p. 291 .....	A1.1:867

# Index

Classification no.

## Butter—Continued

Production of, type of dairy cow in relation to (Lawson). 1901. p. 28 .....	A1.9:124
Production statistics of cheese and. 1873. p. 279 .....	A27.9:11
Quality of, effect of cotton-seed meal on (Allen). 1900. p. 24 ..	A1.9:119
Scores of, exported. 1899. p. 226 .....	A4.1:899
Stripper, note on. 1898. p. 24 .....	A1.9:84
Volatile acids in, determination of total (Goldmann). 1890. p. 112 .....	A7.3:24
Water in. 1901. p. 30 .....	A1.9:133
<i>See also</i> Oleomargarine — Renovated butter.	

Butter factories. *See* Creameries.

## Butter fat:

Milk or cream, method of determining, by difference (McKeown). 1894. p. 194 .....	A7.3:43
Refractive index of (Wiley). 1888. p. 36 .....	A7.3:19
Soluble acids in, estimation of (Planchon). 1890. p. 112 .....	A7.3:24
Variations of volatile acids in (Menozzi). 1890. p. 111 .....	A7.3:24
Volatile acids present in, quantity of (Vieth). 1890. p. 99 .....	A7.3:24

## Butter making:

Farm (Goodrich). 1897 .....	A1.9:57
Pasteurization of milk for. 1899. p. 23 .....	A1.9:92
Recently patented process of (Salmon). Nov. 20, 1897 .....	A21.2:B97
Swartz system of, in Sweden (Andrews). 1876. p. 198 .....	A27.9:14
Testing cows as to, some notes in connection with (Scovell). 1899. p. 123 .....	A10.3:65

Butter standard, paper relative to (Curtis). p. 142 .....	A1.7:2
Butter substitutes (De Schweinitz). 1895. p. 445 .....	A1.10:895
Butterfly, gray hair-streaked, its damage to beans. 1895. p. 354 .....	A9.7:7
Butterweck, Otto Carl. Culture of tobacco. 1898 .....	A1.9:82

## Cabbage:

Black rot of (Smith). 1898 .....	A1.9:68
Loss of nutrients in boiling (Snyder). 1897. p. 7 .....	A10.3:43
<i>See also</i> Garden vegetables.	

Cabbage and allied plants, bacterial disease of (Russell). 1898. p. 86 .....	A10.3:49
--	----------

Cabbage bug. *See* Harlequin cabbage bug.

Cabbage-moth, note on (Glover). 1872. p. 137 .....	A27.9:10
--	----------

## Cabbage worms:

Remedies for, reports on (Lacey). p. 133 .....	A1.1:883
same, p. 133 .....	A9.1:883
same (Rives), p. 134 .....	A1.1:883
same, p. 134 .....	A9.1:883
Report on. p. 107 .....	A1.1:883
same, p. 107 .....	A9.1:883

Cache County, Utah, soil survey in (Means). 1900. p. 115 .....	A1.8:64
Cache Creek, Cal., irrigation investigations on (Wilson). 1901. p. 155 .....	A10.3:100

## Cache la Poudre Valley:

Colorado, soil survey in (Means). 1900. p. 121 .....	A1.8:64
Reservoir system of, report on (Nettleton). 1901 .....	A10.3:92

Cacœcia cerasivorana, oviposition of (Weed). 1900. p. 33 .....	A9.6:26
--	---------

Cactus, North American species of, preliminary revision of (Coulter). 1892. p. 91 .....	A6.5:3
---	--------

Cactus. *See also* Cereus — Opuntia.

Cactuses, geographic and vertical distribution of, in deserts and desert ranges of southern California, southern Nevada, northwestern Arizona, and southwestern Utah, notes on (Merriam). 1893. p. 345 .....	A5.5:7
--	--------

Cailletet, Paul Louis. Photographic apparatus for measuring altitudes attained by balloons. 1897. p. 443 .....	A29.6:25
--	----------

Caine, Thomas A. *See*, as joint author, Mooney, Charles N.

Cairo, Ill., water travel at, lines of equal time of. 1892 .....	A29.2:R13 <sup>1</sup>
--	------------------------

Cajori, F. Doudna, Pearl Eugene, short biography of. 1900. p. 202 ..	A29.6:28
--	----------

Calamagrostis, North American species of, revision of (Kearney). 1898. p. 7 .....	A3.3:11
---	---------

Calamovilfa, notes on (Scribner and Merrill). 1901. p. 2 .....	A3.4:35
--	---------

**Index**  
Classification no.

Calcium carbonate, solubility of, in aqueous solutions of certain electrolytes in equilibrium with atmospheric air (Cameron and Seidell). 1901. p. 58 .....	A26.3:18
Calcutta, India, hides and skins from, imports of (Patterson). p. 523.	A4.1:898
Caldwell, George Chapman:	
Address of, as president of Association of Official Agricultural Chemists, at eighth annual meeting. 1891. p. 7 .....	A7.3:31
Agricultural experiment station as educator of farmer. 1882. p. 20.	A1.8:22
Horse, analysis of urine of, in last stages of influenza. p. 247....	A1.1:872
Calf. See Calves.	
Calico back cabbage bug. See Harlequin cabbage bug.	
California:	
Agricultural resources of (Dunn). p. 581 .....	A1.1:866
Agricultural situation in (Mead). 1901. p. 17 .....	A10.3:100
Agriculture of—	
1862. p. 588 .....	A1.1:862
1867. p. 373 .....	A27.9:5
1872. p. 189 .....	A27.9:10
1878. (Hilgard). p. 476 .....	A1.1:878
Alfalfa in. 1872. p. 296 .....	A27.9:10
Alkali soils and waters in, 1888-89 (Hilgard). p. 297 .....	A15.2:P94 <sup>1</sup>
Angora goat in. 1891. p. 35 .....	A27.9:29
Australian Scymnus established and described in (Riley). 1892. p. 127 .....	A9.7:5
Beet-sugar factories in, information relative to. 1870. p. 357 ...	A27.9:8
Beet sugar in. 1887. p. 452 .....	A27.9:25
Big trees of. 1900 .....	A13.2:B48
same .....	A13.3:28
Black scale in, note on. 1886. p. 34 .....	A9.3:12
Black scale of, found in South Carolina, note on. 1886. p. 36...	A9.3:12
Blastophaga psenes, first introduction of (Eisen). 1891. p. 128..	A9.7:4
Butter, export of, to Orient (Pearson). p. 266 .....	A4.1:899
same (reprinted). 1900 .....	A4.3:24
Capri fig experiments in, present status of (Howard). 1899. p. 28.	A9.6:20
Cattle—	
anthrax and Southern cattle fever among (Bowhill). p. 443..	A4.1:887-8
same, further investigation (Chandler). p. 450 .....	A4.1:887-8
destruction of, by various diseases (Mercer). p. 452 .....	A4.1:887-8
same, report of autopsies (Bowhill). p. 453 .....	A4.1:887-8
industry of (Mercer). p. 239 .....	A4.1:886
quarantine line for, order modifying—	
Mar. 19, 1897 .....	A4.5:2
Dec. 16, 1897, p. 4 .....	A4.5:8-14
Mar. 25, 1898 .....	A4.5:18
Aug. 30, 1899 .....	A4.5:45
Dec. 19, 1899, p. 10 .....	A4.5:49-55
Dec. 14, 1900, p. 10 .....	A4.5:80-87
Jan. 11, 1902, p. 4 .....	A4.5:93
Dec. 27, 1902, p. 4 .....	A4.5:101
See also Sacramento County—Solano County.	
Central, land in, methods of applying water to (Grunsky). 1891. pt. 1. p. 307 .....	A15.2:Ir7
Climate, soil characteristics, and irrigation methods of (Irish). 1895. p. 475 .....	A1.10:895
Climatology of, note on (Abbe). 1900. pp. 165, 249 .....	A29.6:28
Coleoptera of, habits of some (Coquillett). 1892. p. 260 .....	A9.7:4
Corn worm or boll worm in (Coquillett). 1889. p. 331 .....	A9.7:1
Cotton raising in. 1872. p. 493 .....	A27.9:10
Crop year in. 1890. p. 520 .....	A27.9:28
Dairying in—	
circular on (Wickson). 1896 .....	A4.3:14
notes upon export of California butter to the Orient and (Pearson). 1900. p. 266 .....	A4.1:899
same (reprinted). 1900 .....	A4.3:24
Donations from, at museum of Agriculture Dept. 1866. p. 342..	A27.9:4
Dry northers of (Abbe). 1895. p. 212 .....	A29.6:23
Eggs of, food value of (Jaffa). p. 510 .....	A4.1:898



# Index

## California—Continued

	Classification no.
Electric storms of (Barwick). 1897. p. 539 .....	A29.6:25
Entomological work in, in 1893 (Koebele). p. 33 .....	A9.3:32
Exotic fruits and useful plants of (Hilgard). 1892. p. 137 .....	A1.8:20
Farm resources and products of. 1868. p. 272 .....	A27.9:6
Farmers' institute work accomplished in (Jaffa). 1902. p. 16 ..	A10.3:120
Farmers of, financial condition of. 1890. p. 637 .....	A27.9:28
Frosts in. (Hilgard). 1896. p. 166 .....	A29.6:24
Fruit-growing in. 1892. p. 99 .....	A1.8:20
Fruit industry of, statistics of (Holmes). 1901 .....	A27.8:23
Fruits from, transportation rates on. 1883. No. 59. p. 45 .....	A27.9:21
Fruits of, tropical and semitropical (Klee). 1891. p. 111 .....	A20.3:1
Grape culture in, present condition of (Husmann). 1898. p. 551.	A1.10:898
Grape products. 1887. p. 583 .....	A27.9:25
Grasses of, plates and descriptions of (Vasey). 1892 .....	A6.2:N82 <sup>2</sup>
same .....	A6.3:13
Grasshoppers in, destructive. 1872. p. 22 .....	A27.9:10
Hessian fly in, note on. 1886. p. 43 .....	A9.3:12
Hop culture in (Flint). 1900 .....	A1.9:115
Horticulture quarantine rules. 1892. p. 166 .....	A1.8:20
Insect, new beneficial, in, establishment of (abstract) (Howard). 1900. p. 16 .....	A9.6:26
Insect control in (Marlatt). 1896. p. 217 .....	A1.10:896
Insect pests in, action taken regarding. 1892. p. 158 .....	A1.8:20
Insects of—	
beneficial and injurious, in 1892 (Coquillett). 1893. p. 9....	A9.3:30
general notes on in 1890 (Koebele). p. 37 .....	A9.3:23
notes on (Woodworth). 1900. p. 90 .....	A9.6:26
report on, 1889 (Koebele). p. 85 .....	A9.3:22
some injurious, in 1893 (Coquillett). p. 22 .....	A9.3:32
Inspection of trees, plants, fruit, etc., as conducted under laws in (Lelong). p. 12 .....	A1.8:57
Irrigation—	
investigations in, report of. 1901 .....	A10.3:100
methods of (Irish). 1895. p. 475 .....	A1.10:895
report on. p. 352 .....	A1.1:874
Land drainage in. 1869. p. 231 .....	A27.9:7
Lichens from, collected by Edward Palmer, from 1888 to 1892, list of (Eckfeldt). 1893. p. 291 .....	A6.5:1
Locust invasion of, in 1891, report on (Coquillett). p. 34 .....	A9.3:27
Lower, plants collected in, by Edward Palmer in 1889, list of (Vasey and Rose). 1890. p. 9 .....	A6.5:1
same, in 1890 (Vasey and Rose). 1890. p. 63 .....	A6.5:1
Melanoplus devastator in, dipterous parasite of (Coquillett). 1892. p. 22 .....	A9.7:5
Molossus from, description of new species (Merriam). 1890. p. 31.	A5.5:4
Northwestern, stock ranges of, notes on grasses and forage plants and range conditions (Davy). 1902 .....	A19.3:12
Phylloxera in (Hilgard). 1892. p. 155 .....	A1.8:20
Plants worth trying in (Behr and Klee). 1892. p. 141 .....	A1.8:20
Products of—	
1866. p. 224 .....	A1.1:866
1867. p. 56 .....	A27.9:5
1868. p. 26 .....	A27.9:6
1869. p. 58 .....	A27.9:7
Rainfall, charts of (McAdie). 1902. p. 362 .....	A29.6:30
Rainfall in, 1860-72. p. 40 .....	A27.9:11
Rainy season in, 1860-69. p. 481 .....	A27.9:8
Red scale of—	
hymenopterous parasites of (Howard). 1894. p. 227 .....	A9.7:6
various methods for destroying (Coquillett). 1890. p. 9....	A9.3:22
Road improvement in, extract from governor's message (Budd). p. 1 .....	A22.4:33
Scale insect from, new (Coquillett). 1891. p. 382 .....	A9.7:3
Scale insects and their enemies in (Smith). 1896. p. 46 .....	A9.6:6



California—Continued

Scale insects of orange in, and particularly icerya or fluted scale, alias white scale, alias cottony-cushion scale, etc. (Riley). 1887. p. 9 .....	A9.3:15
Scale insects of, report for 1891 (Coquillett). p. 13 .....	A9.3:26
Shells, land and fresh-water, collected in, by Death Valley Expedition (Stearns). 1893. p. 269 .....	A5.5:7
Silk culture in, letter on (Prevost). 1867. p. 285 .....	A27.9:5
Soil characteristics of (Irish). 1895. p. 475 .....	A1.10:895
Soils of (Hilgard). p. 476 .....	A1.1:878
Southern—	
agricultural experiment farm, sunshine at (Henry). 1896. p. 237 .....	A29.6:24
bat, free-tailed, from desert region of, description of new species of (Merriam). 1889. p. 23 .....	A5.5:2
birds observed in, by Death Valley Expedition of 1891, notes on (Fisher). 1893. p. 7 .....	A5.5:7
cactuses, yuccas, and agave in deserts and desert ranges of, geographic and vertical distribution of (Merriam). 1893. p. 345 .....	A5.5:7
fishes of Death Valley Expedition, 1891, collected in, report on, with descriptions of new species (Gilbert). 1893. p. 229 .....	A5.5:7
frosts in, their prediction and prevention (Abbe). 1895. pp. 341, 464 .....	A29.6:23
grasses of desert region of, plates and descriptions of (Vasey). 1890 .....	A6.2:N82 <sup>1</sup>
same .....	A6.3:12
plants collected in, by Edward Palmer in 1888, list of (Vasey and Rose). 1890. p. 1 .....	A6.5:1
spermophile from, description of new (Merriam). 1889. p. 15 .....	A5.5:2
trees and shrubs in deserts and desert ranges of, distribution of (Merriam). 1883. p. 285 .....	A5.5:7
weather crop bulletin, history of (Franklin). 1896. p. 46 .....	A29.3:18
Sunstroke in (Phillips). 1896. p. 454 .....	A29.6:24
Swamp and overflowed lands in, reclamation of. p. 179 .....	A1.1:872
Swamp-land reclamation in, 1872. p. 18 .....	A27.9:10
Tea culture in. 1870. p. 38 .....	A27.9:8
Thunderstorms in, notes on (Abbe). 1898. p. 20 .....	A29.6:26
Tortricid from, description of new (Walsingham). 1891. p. 465 .....	A9.7:3
Vegetables from, transportation rates on. 1883. No. 59. p. 45 .....	A27.9:21
Vine disease, preliminary report of investigations (Pierce). 1892. .....	A28.3:2
Viticulture, quarantine rules. 1881. p. 166 .....	A1.8:20
Viticulture in (Sargent). 1882. p. 157 .....	A1.8:22
same. 1882. p. 99 .....	A1.8:20
Wine growing in. 1868. p. 280 .....	A27.9:6
Wines and brandies of (Hilgard). 1882. p. 109 .....	A1.8:20
Wines of, notes on. 1865. No. 2. p. 14 .....	A27.9:3
same. 1867. p. 87 .....	A27.9:5
Wool-growing in. 1854-74. p. 248 .....	A27.9:13
Woolly aphis remedies, note on. 1886. p. 43 .....	A9.3:12
Yucca whipplei in, pollination of (Coquillett). 1893. p. 311 .....	A9.7:5
See also Alvarado — Bakersfield — Cache Creek — Folsom — Fresno — Gage Canal — Hanford — Honey Lake Basin — Imperial — Kings River — Los Angeles County Horticultural Commission — Los Angeles River — Mendocino County — Napa County — Oakland — Riverside — Sacramento — Sacramento County — Salinas Valley, Monterey County — San Bernardino — San Diego — San Francisco — San Gabriel — San Jacinto River — San Joaquin — San Joaquin River — Santa Ana — Santa Barbara — Sausalito — Shasta, Mount — Sierra Nevada Mountains — Solano County — Sweetwater River — Tamalpais, Mount — Tule River Basin — Ventura — West Berkeley — Yuba County — Yuba River.	
California Agricultural Experiment Station, nutrition investigations at, 1896-1898. (Jaffa) .....	A10.3:84
Same, among fruitarians and Chinese, 1899-1901. (Jaffa) .....	A10.3:107

# Index

	Classification no.
California, Gulf of:	
Head of, list of plants collected by Edward Palmer et, in 1889 (Vasey and Rose). 1890. p. 27.....	A6.5:1
Storm, great, of Oct., 1896 [1895], in (Abbe). 1895. p. 379.....	A29.6:23
Callender, C. W. Potato raising in Tennessee. p. 657.....	A1.1:880
Caloptenus spretus. See Grasshopper.	
Calorimeter. See Respiration calorimeter.	
Calorimetric determination of heating value of corn (Richards). 1898. p. 95 .....	A10.3:49
Calothyssanis amaturaria, a geometrid moth, life history of (Packard). 1892. p. 382 .....	A9.7:4
Calumet plantation sugar experiment station, Pattersonville, Ia., record of experiments at (Edson). 1889 .....	A7.3:23
Same (Coombs). 1892. p. 48.....	A7.3:37
Calvert, Edgar B.:	
Searchlight for weather signals. 1898. p. 58.....	A29.6:26
Weather Bureau—	
how it disseminates forecasts and warnings. 1896. p. xxii...	A29.1:896
relation of, to Department of Agriculture. 1899. p. 54 .....	A29.3:24
Weather map—	
daily, development of. 1899. p. 144 .....	A29.3:24
is it appreciated and understood by the masses? would not postal card weather forecast prove satisfactory substitute for map? 1899. p. 100 .....	A29.3:24
Calvert, Edgar B., and Phillips, William Fowke Ravenel. Snow temperatures, report on, 1899. p. 55.....	A29.6:27
Calvert, J. C. See, as joint author, Kastle, Joseph Hoeing—Marvin, Paul.	
Calvert, S. See, as joint author, Gibson, H. B.	
Calvert County, Md., soil survey of (Bonsteel and Burke). p.147...	A26.5:900 <sup>1</sup>
Calves:	
Cost of raising (Langworthy). 1899. p. 21 .....	A1.9:107
Fattening, supplements to skim milk in. 1899. p. 21 .....	A1.9:92
Feeding, with milk of tuberculous cows (Wilcox). 1899. p. 23.	A1.9:107
Parasitic bronchitis among (Trumbower). p. 465.....	A4.1:884
Raising on plains (Rust). p. 177 .....	A4.1:886
Verminous bronchitis in, and its treatment by tracheal injections. p. 554 .....	A1.1:885
same, p. 278 .....	A4.1:885
Young, diseases of (Law). p. 267 .....	A4.2:C29 <sup>1</sup>
Cameron, Frank Kenneth:	
Carbonates and bicarbonates in aqueous solution, estimation of. 1901. p. 77 .....	A26.3:18
Gypsum, solubility of, in aqueous solutions of sodium chloride. 1901. p. 25 .....	A26.3:18
Sodium carbonate, or black alkali—	
formation of, by plants. 1902. p. 61 .....	A1.8:71
resistance to, by certain plants. 1902. p. 71.....	A1.8:71
Soil solutions: their nature and functions, and classification of alkali lands. 1901.....	A26.3:17
Soils, study of, application of theory of solution to. 1900. p. 423.	A26.5:900 <sup>1</sup>
same. 1899. p. 141 .....	A1.8:64
See also, as joint author, De Schweinitz, Emil Alexander—Kearney, Thomas Henry.	
Cameron, Frank Kenneth, and Briggs, Lyman James. Carbonates and bicarbonates in aqueous solution, equilibrium between. 1901. p. 9 .....	A26.3:18
Cameron, Frank Kenneth, and Seidell, Atherton:	
Calcium carbonate, solubility of, in aqueous solutions of certain electrolytes in equilibrium with atmospheric air. 1901. p. 58.	A26.3:18
Gypsum, solubility of, in aqueous solutions of certain electrolytes. 1901. p. 46 .....	A26.3:18
Campbell, A. W. Road making from engineer's standpoint. 1901. p. 45.....	A22.3:21
Campbell, George W. Grape, improvement by hybridizing, cross-breeding, and seedlings. p. 209 .....	A1.1:862

	<b>Index</b>
	Classification no.
Campbell, Samuel W. Live-stock industry, condition of, of Wisconsin. p. 321 .....	A4.1:889-90
Campbell-Hepworth, M. W. <i>See</i> Hepworth.	
Camphor barometer, notes on (Abbe). 1899. p. 255 .....	A29.6:27
Camphor tree, circular on (Dewey) .....	A6.4:12
Canada:	
Agricultural products of, 1865. No. 9. p. 18 .....	A27.9:3
Agricultural statistics of, 1884. No. 4. p. 40 .....	A27.9:22
American cattle in, restrictions on. p. 455 .....	A4.1:884
Barometry of (Bigelow). 1902 .....	A29.1:901 <sup>2</sup>
Climatological data for, notes on (Abbe). 1899. p. 253 .....	A29.6:27
Farmers' institutes in, history and status (Bailey). 1900 .....	A10.3:79
Grasses of U. S. and British America (Vasey). 1892. p. 1 .....	A6.5:3
Insects, injurious, of year in, notes upon (Fletcher)—	
1891. p. 247 .....	A9.7:3
1892 (Fletcher). p. 124 .....	A9.7:5
1900 (Fletcher). p. 94 .....	A9.6:26
Laws of, relative to restriction of plant diseases (Smith). 1896 ..	A28.3:11
Live-stock shipments from, to England. p. 77 .....	A4.1:895-6
Maple sugar in, production of (Hough). 1884. p. 394 .....	A13.5:4
Markets for American products in. 1895 .....	A12.3:4
Meteorological service of (Stupart). 1899. p. 204 .....	A29.6:27
same, Pacific coast division (Abbe). 1899. pp. 102, 212 .....	A29.6:27
Navigation in, opening of (Abbe). 1897. p. 63 .....	A29.6:25
Northwest irrigation act, water rights under (Dennis). 1901.	
p. 11 .....	A10.3:96
Reciprocity treaty with, note on. 1866. pp. 16, 144 .....	A27.9:4
Silos and ensilage, record of practical tests in. 1882 .....	A1.6:48
Statistics of. 1890. p. 394 .....	A27.9:28
Tineina of U. S. and, steps toward revision of Chambers's index	
of. <i>See</i> Walsingham, Lord.	
Weather forecasting in, long range (Gun). 1899. p. 149 .....	A29.6:27
<i>See also</i> Dairying—Manitoba—Toronto.	
Canada thistle:	
Circular on (Dewey) .....	A6.4:27
Law concerning. 1869. p. 300 * .....	A27.9:7
Canadian-British cattle trade:	
Decrease in (Beutelspacher). p. 515 .....	A4.1:899
Canadian cattle:	
From port of Boston, Mass., correspondence with S. W. Allerton concerning exportation of. Dec. 28, 1896 .....	A1.2:C29 <sup>3</sup>
Importation of, for exhibition at Pan-American Exposition, Buffalo, N. Y., order providing for. 1900 .....	A4.5:65
Providing additional ports of export for, in bond. 1899 .....	A4.5:44
Canadian cattle, sheep, and swine, special order relative to importation of, for exhibition at International Live-Stock Exhibition, Chicago—	
July 13, 1900 .....	A4.5:67
Sept. 12, 1901 .....	A4.5:90
July 16, 1902 .....	A4.5:96
Canadian field peas (Shaw). 1895. p. 223 .....	A1.10:895
Canadian northwest irrigation act, water rights under (Dennis).	
1901. p. 11 .....	A10.3:96
Canaille, reports on .....	A10.4:25
Canals. <i>See</i> Amity Canal—Gage Canal—Great Eastern Canal—Logan and Richmond Canal—Mississippi River.	
Cane juices and sirups, brown coal and wood char in filtration of (Thompson). p. 268 .....	A1.1:887
Same. 1889. p. 99 .....	A7.3:17
Cane sugar:	
Determination of, in presence of commercial glucose (Weber and McPherson). 1894. p. 126 .....	A7.3:43
Industry in U. S., condition and prospects of. 1877 .....	A1.6:1
same .....	A1.2:An7 <sup>2</sup>
same. p. 23 .....	A1.1:877

\* By a misprint, this page number appears twice.

# Index

Classification no.

Cane sugar—Continued	
Products of manufactories, incinerated with sulphuric acid, report on true ash in (Biard). 1891. p. 77.....	A7.3:31
See also Sugar.	
Canes. See "Gran cultura"—Orange sorghum cane.	
Canker worms:	
Circular relative to (Coquillett). 1895 .....	A9.5:9
Entomological Commission, report on. 1883. p. 157 .....	A8.1:3
Fall, observations on banding of trees to prevent injury by (Britton). 1901. p. 160.....	A10.3:99
Notes upon (Hargitt). 1890. p. 8 .....	A9.7:3
Spring, experience with (Howell). 1883. App. p. 82 .....	A8.1:3
Canned meats, chemical examination of (Wiley). 1899.....	A7.4:5
Canned vegetables. See Vegetables.	
Canning industry, note on—	
1889. p. 29 .....	A27.9:27
1890. p. 33 .....	A27.9:29
1891. p. 666 .....	A27.9:29
1893. p. 46 .....	A27.9:31
1894. p. 39 .....	A27.9:32
Cannon, Minna A. See, as joint author, Handy, Robert Breckenridge.	
Cannonading, prevention of hail by (Abbe). 1900. p. 251 .....	A29.6:28
Canstadt, Germany, milk from, report on (Zeitler). 1890. p. 153 ..	A7.3:24
Canterbury, New Zealand, nor'westers of (Abbe). 1895. p. 383 ...	A29.6:23
Cape Colony:	
Locusts in. 1879. App. p. 68.....	A8.1:3
Prices in (Stowe). p. 523.....	A4.1:898
Sheep and wool in (Roberts). p. 522 .....	A4.1:898
Cape May, N. J., waterspout at. 1902. p. 487 .....	A29.6:30
Capillary studies and filtration of clay from soil solutions. 1902 ....	A28.3:19
Caprifig experiments in California, present status of (Howard). 1899.	
p. 28 .....	A9.6:20
Caprifig wasp. See Blastophaga psenes.	
Capron, Horace:	
Address of—	
at Illinois State Agricultural Society Fair, Decatur, Sept., 1870.	
p. 420 .....	A27.9:8
before "Congress of Cotton States," Augusta, Ga., Oct., 1870.	
p. 473 .....	A27.9:8
before Montgomery County (Md.) Agricultural Society. 1870.	
p. 351 .....	A27.9:8
Beet sugar, production of. 1868. p. 59 .....	A27.9:6
[Also issued as 40th Cong., 2d sess., H. mis. doc. no. 84; serial no. 1349.]	
Farmers of France, circular offering aid to. 1871. p. 65 .....	A27.9:9
Japan, agriculture in. p. 364.....	A1.1:873
Resignation of, as Commissioner of Agriculture and appointment of his successor, Frederick Watts. 1871. p. 255.....	A27.9:9
See also, for reports as Commissioner of Agriculture, 1867-1870 ...	A1.1:
Carabid malodorous, Nomius pygmæus, dej, notes on (Barrows).	
1897. p. 49.....	A9.6:9
Carbohydrates:	
Character of, abstract of paper on (Wohl). 1890. p. 134 .....	A7.3:28
Fiber in substances rich in, report of committee on estimation of.	
1891. p. 63 .....	A7.3:31
Wheat, maize, flour, and bread (Stone). 1896.....	A10.3:34
See also Cattle foods.	
Carbon, metabolism of, in human organism, with respiration calorimeter of special construction, report of preliminary investigations on (Atwater and others). 1897.....	A10.3:44
Carbon bisulphid:	
As an insecticide (Smith). 1894. p. 108 .....	A9.7:7
As an insecticide (Hinds). 1902.....	A1.9:145
For crayfish (Weed). 1895. p. 98 .....	A9.6:2
Fumigation with (Du Buysson). 1893. p. 159.....	A9.7:6
same (Hinds). 1901. p. 78.....	A9.6:30

**Index**  
Classification no.

Carbon bisulphid—Continued	
Seed treated with, vitality of (Hicks and Dabney).....	A6.4:11
Carbonate of soda. <i>See</i> Soda.	
Carbonates and bicarbonates in aqueous solution:	
Equilibrium between (Cameron and Briggs). 1901. p. 9.....	A26.3:18
Estimation of (Cameron). 1901. p. 77.....	A26.3:18
Carbonation. <i>See</i> Diffusion and carbonation.	
Carbonic acid:	
Liberation of, by respiration and perspiration of various animals (McMurtrie). 1875. p. 311.....	A27.9:13
Use of, in purifying the diffusion juices of sugar cane and sorghum (Wiley). 1886.....	A7.3:8
Carbonic-acid gas in atmosphere (Abbe). 1895. p. 300.....	A29.6:23
Carcasses of pigs, chemical composition of (Wiley and others). 1898.	A7.3:53
Card, F. W. Educational status of horticulture, report on. 1901. p. 134.....	A10.3:99
Caribbean Sea, northers in, notes on (Abbe). 1898. p. 568.....	A29.6:26
Carleton, Mark Alfred:	
Cereal rusts of U. S., a physiological investigation. 1899.....	A28.3:16
Cereals and forage plants collected in Russia by, for section of seed and plant introduction, Agriculture Department. 1899..	A6.6:4
Emmer, a grain for semiarid regions. 1901.....	A1.9:139
Macaroni wheats. 1901.....	A19.3:3
Plants, native, of Oklahoma Territory and adjacent districts, observations on. 1892. p. 220.....	A6.5:1
Russian cereals adapted for cultivation in U. S. 1900.....	A6.3:23
Wheat culture, improvements in. 1896. p. 489.....	A1.10:896
Wheat growing, successful, in semiarid districts. 1900. p. 529..	A1.10:900
Wheat industry, new, for semiarid West. 1901.....	A28.4:18
Wheats, American, basis for improvement of. 1900.....	A28.3:24
<i>See also</i> , as collector, Holzinger, J. M.	
Carlisle, William W.:	
Marvin's weighing rain and snow gauge. 1899. p. 131.....	A29.3:24
River gages in upper Mississippi Valley. 1902. p. 222.....	A29.3:31
Carman, Ezra A.:	
Sheep industry in States east of Mississippi River. 1892. p. 11..	A4.2:Sh4 <sup>2</sup>
Sheep of Great Britain. p. 145.....	A4.1:889-90
Carmen Island, plants collected on, by Edward Palmer in 1890, list of (Rose). 1892. p. 129.....	A6.5:1
Carnations and other pinks, stigmonose a disease of (Woods). 1900.	A28.3:19
Carolina, port. <i>See</i> Port Carolina.	
Carp (Cyprinus carpio) as an eradicator of fluke disease (Stiles). p. 220.....	A4.1:901
Carpenter, Ford A.:	
Fog, utilization of, report on. 1899. p. 195.....	A29.6:27
San Diego waterspout, report on. 1898. p. 545.....	A29.6:26
Carpenter, L. G.:	
Artesian-well investigation, field work in Colorado. 1890. p. 173.	A15.2:Ar7
same, in New Mexico. p. 233.....	A15.2:Ar7
Irrigation—	
methods of. 1893. p. 142.....	A10.3:16
statistics and progress in Colorado. 1890. p. 181.....	A15.2:P94 <sup>1</sup>
Carpenter, R. C. Bicyclers, mechanical work and efficiency of. 1901. p. 57.....	A10.3:98
Carpet beetle, or "Buffalo moth":	
Circular relative to (Howard). 1894.....	A9.5:5
Report on (Riley). 1889. p. 127.....	A9.7:2
Species injurious to woollen goods, clothing, carpets, upholstery, etc. (Howard and Marlatt). 1896. p. 58.....	A9.6:4
Carr, Oma:	
Seed-selection work at Medicine Lodge, Kansas, résumé of. 1893. p. 28.....	A7.3:40
Sorghum-sugar experiments at Attica, Kans. 1889. p. 72.....	A7.3:26
same, at Medicine Lodge, Kans. 1892. p. 25.....	A7.3:37
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Carr, Oma, and Sanborn, T. F. Liquids, viscous organic, dehydration of. 1895. p. 134.....	A7.3:47

# Index

	Classification no.
Carrión crows, communication of hog cholera by (Ford). p. 325...	A4.1:895-6
Carroll, Daniel J. Weather Bureau station force, personnel of. 1902. p. 35 .....	A29.3:31
Carrots, loss of nutrients in boiling (Snyder). 1897. p. 7.....	A10.3:43
Carrow, G. D.: Cattle farming in the Pampas. p. 486.....	A1.1:865
Sheep farming in the Pampas. p. 223.....	A1.1:864
Carse, George B. Florida, climate, soil, productions, and agricultural capabilities. 1882. p. 3 .....	A1.8:21
Carson City, Nevada: Earthquakes at, 1875-98 (Friend). p. 61.....	A29.6:28
Observatory at, seismograph at (Friend). 1900. p. 245.....	A29.6:28
Cary, C. A.: Alabama, farmers' institute work accomplished in. 1902. p. 15.	A10.3:120
Bacilli, tubercle, growing, for tuberculin. 1898. p. 8.....	A4.3:22
Cary area, North Carolina, soil survey of (Coffey and Hearn). p. 311.	A26.5:901 <sup>1</sup>
Carya alba, stomata on, strange developments of, caused by phyllox- era (Owen). 1892. p. 327.....	A9.7:4
Caryopsis of grasses, structure of, with reference to their morphology and classification (Kennedy) .....	A3.3:19
Cascade Mountains of Oregon, forest growth and sheep grazing in (Coville). 1898 .....	A13.3:15
Casein: Determination of, in cow's milk (Van Slyke). 1893. p. 109....	A7.3:38
Estimation of, by method of Kjeldahl (L'Hote). 1889. p. 170..	A7.3:24
Caseous lymph-adenitis, Ovine, nature, cause, and economic impor- tance of (Norgaard and Mohler). p. 638.....	A4.1:899
Cashmere goats, wool of. 1867. p. 254.....	A27.9:5
Cass County, Nebraska, swine-plague in (Hines). 1879. p. 177....	A1.6:12
Cassava: Starch from, manufacture of (Wiley). 1900.....	A7.3:58
Sweet, its culture, properties, and uses (Wiley). 1894.....	A7.3:44
Castor-oil bean, cultivation of— 1865. No. 10. p. 16.....	A27.9:3
1866. p. 287 .....	A27.9:4
1868. p. 93 .....	A27.9:6
1869. p. 143 .....	A27.9:7
Castor oil plant.....	A1.5:1
Casualties due to lightning (McAdie). p. 510.....	A29.1:891 <sup>2</sup>
Catalase, a new enzym of general occurrence, with special reference to tobacco plant (Loew). 1901.....	A1.8:68
Catalpa, hardy: Diseases of (Schrenk). 1902. p. 49.....	A13.3:37
In commercial plantations (Hall). 1902.....	A13.3:37
Catania, Italy, cost of hauling farm products over wagon roads at (Bruhl). p. 10.....	A22.4:27
Catarrh. See Epizootic catarrh — Sheep.	
Caterpillar: Damaging cork tree. 1889. p. 136.....	A9.7:2
Purslane, report on. 1888. p. 104.....	A9.7:1
See also <i>Bucculatrix canadensisella</i> — Clover-seed caterpillar — Cotton caterpillars — Hairy caterpillars — Tent caterpillar.	
Catron, A. Spanish fever, investigation of. 1868. p. 357 .....	A27.9:6
Cattle: American— Canadian restrictions on. p. 455 .....	A4.1:884
inspection of, in Great Britain. p. 82 .....	A1.1:890
same, p. 70 .....	A4.1:889-90
Anthrax among. See Anthrax.	
Argentina, statistics of, 1899 (Jones). p. 515 .....	A4.1:899
same (Salmon). 1902.....	A4.4:37
Ayrshire, characteristics of (Howard). p. 193.....	A1.1:863
Beef— American breeds of, with remarks on pedigrees (Rommel). 1902.	A4.3:34
conformation of dairy cattle and (Soule). 1902.....	A1.9:143
feeding, in Middle States (Lodge). p. 212.....	A1.1:867



**Cattle—Continued**

**Beef—Continued**

of the West (Corbett). p. 326.....	A1.1:862
pure-bred, Mexico as a market for (Salmon). 1902.....	A4.3:41
Blackleg among. <i>See</i> Blackleg.	
Blood of, persistence of Texas fever organism in (Schroeder). p. 42.....	A4.1:899
Bones of, diseases and accidents to (Atkinson). p. 281.....	A4.2:C29 <sup>2</sup>
Breeds of, best, adapted for general farmer of Western States (Baker). p. 95.....	A1.7:2
Bronchitis in (Williams). p. 603.....	A1.1:880
Canadian-British trade in, decrease in (Beutelspacher). p. 515..	A4.1:899
Cestodes of, adult, revision of (Stiles and Hassall). 1893.....	A4.3:4
Condition of. 1873. p. 143.....	A27.9:11
same. 1875. p. 155.....	A27.9:13
Consumption and production of, in Great Britain and Ireland. 1865. No. 7. p. 27.....	A27.9:3
Corn, smutty, ill effects on (Gamgee). 1869. p. 78.....	A1.2:C29 <sup>1</sup>
same, p. 73.....	A1.2:C29 <sup>2</sup>
Corn smut, is it injurious to? 1898. p. 16.....	A1.9:69
Cornstalk disease among. <i>See</i> Cornstalk disease.	
Cutaneous disease among, outbreak of. p. 361.....	A4.1:889-90
Dairy. <i>See</i> Dairy cattle.	
Decrease of. 1865. No. 4. p. 13.....	A27.9:3
Dehorning of (Gowell and Russell). p. 489.....	A4.1:898
Digestive organs of, diseases of (Murray). p. 15.....	A4.2:C29 <sup>2</sup>
Dipping—	
experimental and practical (Nørgaard). 1898. p. 453.....	A1.10:898
for destruction of ticks (Nørgaard). p. 109.....	A4.1:895-6
Disease among—	
in Marshall County, Kans. (Steddom). p. 382.....	A4.1:898
in Uruguay (Swalm). p. 385.....	A4.1:898
not distinguishable from rabies. 1896. p. 71.....	A4.3:10
outbreak of, in Missouri (Michener). 1891. p. 387.....	A4.1:889-90
periods of incubation or latency of. 1900. p. 740.....	A1.10:900
strange (Lenoir). 1879. p. 253.....	A1.6:12
Diseased—	
fluids of, with reference to presence of cryptogamic growths (Billings and Curtis). 1869. p. 174.....	A1.2:C29 <sup>1</sup>
same, p. 156.....	A1.2:C29 <sup>2</sup>
same.....	A1.2:C29 <sup>5</sup>
transportation of, letter to railroad and transportation companies relative to. 1890.....	A1.2:R13 <sup>1</sup>
Diseases of—	
and cattle feeding. 1892.....	A4.2:C29 <sup>2</sup>
contagious, how they are imported and what they cost (Gadsden). 1883. p. 49.....	A1.8:29
correspondence relating to. 1877. p. 455.....	A1.1:877
same. 1898. p. 524.....	A1.1:898
general remarks on (Gamgee). 1869. p. 162.....	A1.2:C29 <sup>1</sup>
in Europe. 1870. p. 435.....	A27.9:8
in United States. 1869.....	A1.2:C29 <sup>1</sup>
infectious (Salmon and Smith). p. 371.....	A4.2:C29 <sup>2</sup>
statistics of, Great Britain. 1883. No. 6. p. 34.....	A27.9:22
same. 1871.....	A1.2:C29 <sup>2</sup>
<i>See also</i> Diseases of animals.	
Ear of, diseases of (Trumbower). p. 367.....	A4.2:C29 <sup>2</sup>
Ergotism among. <i>See</i> Ergotism.	
Export, inspection of, before shipment. p. 83.....	A1.1:890
same, p. 71.....	A4.1:889-90
Exportation of, from Boston, prohibition of. 1902.....	A4.5:100
Exportation of, in vessels carrying hides from foreign countries. orders concerning. 1900.....	A4.5:61
Eye of, and its appendages, diseases of (Trumbower). p. 353...	A4.2:C29 <sup>2</sup>
Fattening of, results of. 1863. No. 5. p. 5.....	A27.9:1
same, 1867. p. 157.....	A27.9:5
Feed, coarse, necessity of, to grow (Davenport). p. 202.....	A4.1:897
Feeding and management of (Henry). p. 439.....	A4.2:C29 <sup>2</sup>

# Index

(Classification no.)

## Cattle—Continued

Texas fever of. <i>See</i> Texas fever.	
Texas itch among, in Kansas (Mayo). p. 488 .....	A4.1:898
Thelemark, of Norway. 1876. p. 432 .....	A27.9:14
Transportation of, regulations concerning .....	A4.5:
Tuberculosis among. <i>See</i> Bovine tuberculosis—Tuberculosis.	
Tumors of (Lowe). p. 321 .....	A4.2:C29 <sup>2</sup>
Urinary organs of, diseases of (Law). p. 137 .....	A4.1:C29 <sup>2</sup>
Venezuelan, shipments of, to Cuba (Ellsworth). p. 516 .....	A4.1:899
Verminous diseases of, in Texas (Stiles). p. 356 .....	A4.1:900
same, further investigations (Stiles). p. 223 .....	A4.1:901
Wisconsin trade in (Perry). p. 125 .....	A4.1:886
<i>See also</i> Animal industries—Animal Industry Bureau—Animals—Anthrax—Ayrshire cattle—Beef—Beeves—Black-leg—Bovines—California—Calves—Canadian cattle—Channel Islands—Colorado—Cornstalk disease—Cows—“Cream pot” stock—Dairy cattle—Dairy herd—Diseases of animals—Ergotism—Farm animals—Foot-and-mouth disease—Guernsey cattle—Holstein cattle—Jaques “cream pot” stock—Kerry breed of cattle—Livestock—Lumpy-jaw—Pleuropneumonia—Southern cattle fever—Spanish fever—Steers—Texas—Texas fever—Thelemark cattle—Tuberculosis—and headings beginning Cattle.	
Cattle and cattle products of Argentine Republic, some statistics of 1899 (Jones). p. 515 .....	A4.1:899
Cattle breeders. <i>See</i> Chicago, Ill., National Convention of Cattle-breeders.	
Cattle breeders' associations, list of, with officers—	
1898. p. 613 .....	A1.10:898
1899. p. 691 .....	A1.10:899
1900. p. 645 .....	A1.10:900
1901. p. 624 .....	A1.10:901
Cattle farming in the Pampas (Carrow). p. 486 .....	A1.1:865
Cattle farms, great. 1888. p. 233 .....	A27.9:28
Cattle foods or feeding stuffs, analysis of:	
Notes on (Huston). 1890. p. 90 .....	A7.3:28
Report of committee on, of Association of Official Agricultural Chemists—	
1887. p. 8 .....	A7.3:16
1888. p. 6 .....	A7.3:19
1889. p. 15 .....	A7.3:24
1890. p. 79 .....	A7.3:28
1891. low in carbohydrates. p. 34 .....	A7.3:31
1891. rich in carbohydrates. p. 45 .....	A7.3:31
1892. low in carbohydrates. pp. 114, 127 .....	A7.3:35
1893. p. 122 .....	A7.3:38
1894. p. 157 .....	A7.3:43
1895. p. 24 .....	A7.3:47
1896. p. 46 .....	A7.3:49
1897. p. 89 .....	A7.3:51
1898. p. 69 .....	A7.3:56
1899. p. 91 .....	A7.3:57
1900. p. 101 .....	A7.3:62
1901. p. 44 .....	A7.3:67
Cattle foods:	
Comparative value of. p. 408 .....	A1.1:865
Condimental and medicinal. 1901. p. 22 .....	A1.9:144
Work in, communications from foreign chemists taking part in (Fassbender). 1894. p. 170 .....	A7.3:43
<i>See also</i> Cattle, feeding of—Fodder.	
Cattle Growers' Association, National. <i>See</i> Kansas City, Mo.	
Cattle industry:	
Address on, at National Convention of Cattle Breeders, Chicago, Ill., Nov. 13, 1884 (Loring) .....	A1.7:6
California (Mercer). p. 239 .....	A4.1:886
Colorado, Wyoming, and Nevada, in 1897 (McNeely). p. 377 .....	A4.1:898
Mexican (Griffith). p. 503 .....	A4.1:900

	<b>Index</b>
	<b>Classification no.</b>
<b>Cattle industry—Continued</b>	
Report on (Grinnell). 1883. p. 232.....	A1.7:2
United States (Wilson). p. 267.....	A4.1:901
Cattle interests of West (Fullinwider). p. 271 .....	A4.1:884
Cattle interests west of Mississippi River, condition of:	
1884 (Grinnell). p. 233 .....	A4.1:884
1885 (Bradley). p. 424 .....	A4.1:885
1887 (Taylor). p. 306 .....	A4.1:887-8
Cattle orders, including special orders; regulations, notices, etc., relating to cattle transportation, quarantine, etc., 1895 to date ..	A4.5:
<b>Cattle plague or rinderpest:</b>	
Cattle traffic in relation to (Law). p. 110.....	A1.7:2
Character of, etc. 1865. No. 7. p. 16.....	A27.9:3
Dry or salted hides, opinion relative to transmission through (Law). p. 321 .....	A1.1:876
Europe, 1865-6 (Dodge). p. 550 .....	A1.1:865
same, 1870. p. 155 .....	A27.9:8
Great Britain. 1865. No. 8. p. 20 .....	A27.9:3
History of. p. 472.....	A1.1:879
same. 1880. p. 185 .....	A1.6:22
Inoculation for. 1872. p. 149.....	A27.9:10
International council on. 1872. p. 229.....	A27.9:10
Legislation necessary against. 1866. p. 174.....	A27.9:4
Notes on—	
1865. No. 9, p. 20; No. 10, p. 27 .....	A27.9:3
1866. pp. 56, 127.....	A27.9:4
1868. p. 186 .....	A27.9:6
Statistics of, in Great Britain. 1866. p. 432.....	A27.9:4
Symptoms of (Gadsden) 1879. p. 255.....	A1.6:12
Vaccination for, Russian official experiments in. 1866. p. 235..	A27.9:4
Cattle-range industry, condition of (Taylor). p. 105.....	A4.1:886
Cattle ranges of Southwest; history of exhaustion of pasturage and suggestions for its restoration (Bentley). 1898.....	A1.9:72
Cattle show of Smithfield club, notes on (Rogers). p. 326.....	A4.1:895-6
Cattle tick. See <i>Ixodes bovis</i> —Southern cattle tick.	
Cattlemen, interstate convention of. See Fort Worth, Tex.	
Caucasus, Russia, agriculture in the. 1893. p. 202 .....	A27.9:31
Candell, A. N. Colorado insects, notes on. 1902. p. 35.....	A9.6:38
Cause, H. Sugar, estimation of, by Fehling's solution. 1890. p. 137 .....	A7.3:28
Cavalry horses in America (Morris). p. 159.....	A1.1:863
Caves, ice (Abbe). 1901. p. 71.....	A29.6:29
<b>Cecidomyiid:</b>	
Injurious to seeds of sorghum (Coquillett). 1898. p. 81.....	A9.6:18
That lives on poison oak (Coquillett). 1895. p. 348.....	A9.7:7
Two new, destructive to buds of roses (Coquillett). 1900. p. 44.	A9.6:22
Cecil County, Md., soil survey of (Dorsey and Bonsteel). p. 103....	A26.5:900 <sup>1</sup>
Cedar bird, food habits of (Beal). p. 192 .....	A1.1:892
Same, p. 192.....	A5.1:892
Cedar Falls, Iowa, sorghum-sugar experiments at (Wiley). 1889.	
p. 12 .....	A7.3:26
Same (Bozarth). p. 57 .....	A7.3:26
Cedros Island, Mexico, list of plants collected by Edward Palmer at, in 1889 (Vasey and Rose). 1890. p. 13.....	A6.5:1
<b>Celery culture:</b>	
At Kalamazoo, Mich. (Little). p. 343 .....	A1.1:886
Report on (Beattie). 1902 .....	A1.9:148
Where carried on, as an industry. 1901. p. 7.....	A1.9:133
Cellulose in plants and animals (Taylor). 1875. p. 316.....	A27.9:13
Same. 1876. p. 196.....	A27.9:14
<b>Census:</b>	
Austria, agricultural. 1865. No. 6. p. 18 .....	A27.9:3
Belgium, agricultural. 1885. No. 24. p. 37.....	A27.9:23
Eleventh, of U. S., agricultural statistics of, discussion of (Hyde). 1896. p. 12.....	A4.3:11
<b>Centipedes:</b>	
House, circular on (Marlatt). 1902 .....	A9.5:48

# Index

	Classification no.
Centipedes—Continued	
Report on. 1894. p. 260 .....	A9.7:7
same (Howard and Marlatt). 1896. p. 43 .....	A9.6:4
Central America:	
Coffee, disease of, danger of introducing into Hawaii (Swingle). 1898 .....	A28.4:16
Cotton crop and its enemies in, consular reports on. 1885. App. p. 59 .....	A8.1:4
Earthquakes in, notes on (Abbe). 1898. p. 365 .....	A29.6:26
Plants of, studies of (Rose). 1897. p. 103 .....	A6.5:5
Central Park, New York City, entomological work in (Southwick). 1891. p. 59 .....	A9.7:4
Central West. <i>See</i> West.	
Centrifugal dairy. <i>See</i> Deerfoot farm.	
Centrifugal force. <i>See</i> Mechanical analysis.	
Century, meteorological, note on (Abbe). 1900. p. 591 .....	A29.6:27
Cercospora circumscriba:	
Almond disease caused by, remedies for (Pierce). 1891. p. 232 ..	A28.5:7
Treatment of, suggestions in regard to (Galloway). 1891. p. 77 ..	A28.5:7
Cereal breakfast foods, study of (Langworthy). 1899. p. 19 .....	A1.9:105
Cereal crops:	
Austrian. 1893. p. 270 .....	A27.9:32
Austro-Hungary, value of (Neumann-Spallert). 1883. No. 64. p. 66 .....	A27.9:21
Circular on. 1896 .....	A27.9:35
English. 1868. p. 148 .....	A27.9:7
Insects affecting, report on some (Webster). 1890. p. 63 .....	A9.3:23
<i>See also</i> Cereals.	
Japanese. 1893. p. 270 .....	A27.9:32
<i>See also</i> Farm products—Grain.	
Cereals:	
Adulteration of cereal products and (Wiley and others). 1898. p. 1169 .....	A7.3:13*
American, wheat, oats, barley, and rye, chemical composition and physical properties of, third report on (Richardson). 1886 .....	A7.3:9
Area and production of, grown in 1879 .....	A1.8:23
Collected at World's Columbian Exposition, analyses of, and comparisons with other data (Wiley). 1895 .....	A7.3:45
Collected in Russia by M. A. Carleton, for section of seed and plant introduction, Agriculture Department. 1899 .....	A6.6:4
Condition of, monthly notes on .....	A27.9:
Consumption of, in Europe, 1885. No. 16 .....	A27.9:23
Crops of. <i>See</i> Cereal crops.	
Estimated production of, of U. S., 1881. No. 41 .....	A27.9:20
Estimates of, of 1882. No. 59 .....	A27.9:21
Exports of, 1866. p. 432 .....	A27.9:4
Geographic distribution of, in North America, Jan. 4, 1897 .....	A5.4:21
same, Mar. 1, 1897 .....	A5.4:22
same (Plumb). 1898 .....	A5.3:11
Growing, ortolid fly injuring. 1895. p. 352 .....	A9.7:7
Improvement of (Blount). 1882. p. 104 .....	A1.8:22
Insects affecting—	
destruction of. 1867. p. 158 .....	A27.9:5
other dry vegetable foods and, report on (Chittenden). 1896. p. 112 .....	A9.6:4
Production and distribution of, in U. S. (Dodge). 1879 .....	A27.2:C33
Production of, in Germany. 1876. p. 367 .....	A27.9:14
Russian—	
adapted for cultivation in U. S. (Carleton). 1900 .....	A6.3:23
official returns of. 1891. p. 474 .....	A27.9:29
Rusts affecting—	
experiments in treatment of (Galloway). 1891. p. 195 .....	A28.5:7
physiological investigation (Carleton). 1899 .....	A28.3:16
Smut in, prevention of (Kellerman and Swingle). 1891. p. 26 ..	A28.5:6
Stored, and other products in Mexico, insects affecting (Chittenden). 1896. p. 27 .....	A9.8:4

	<b>Index</b>
	<b>Classification no.</b>
Cereals—Continued	
Statistics of, annual .....	A27.1:
Tariff rates on, in European countries, 1894. p. 323.....	A27.9:32
Variety testing in; how can it be rendered more decisive? (Hickman). 1891. p. 97.....	A10.3:7
<i>See also</i> Grain, and references thereunder.	
Cereals and cereal products, adulteration of (Wiley and others). 1898. p. 1169.....	A7.3:13 <sup>9</sup>
Cerebro-spinal meningitis. <i>See</i> Horses.	
Cereus, North American species of, preliminary revision of (Coulter). 1896. p. 355 .....	A6.5:3
Cerletti, M. G. B. Peronospora overcome by hydrate of lime. 1885. p. 71 .....	A6.3:2
Cestodes:	
Adult—	
of cattle, sheep, and allied animals, revision of (Stiles and Hassall). 1893.....	A4.3:4
of man which may possibly occur in returning American troops (Stiles and Tayler). 1902. p. 43 .....	A4.3:35
Larval, of man which may possibly occur in returning American troops (Stiles and Tayler). 1902. p. 47 .....	A4.3:35
<i>See also</i> Tapeworms.	
Chaetochloa, North American species of (Scribner and Merrill). 1900.	A3.3:21
Chaffee, Frank P.:	
Meteorology in public schools; how much should be attempted; methods of teaching. 1902. p. 85.....	A29.3:31
Weather-forecast distribution: should the wording of forecasts be confined to vocabulary of present logotype outfit? is it advisable to extend vocabulary of logotype outfit? 1889. p. 48.	A29.3:24
Weather forecasts, stamping, on mail matter, report of committee appointed to investigate subject of. 1896. p. 51.....	A29.3:18
Weather map, how to make synopsis instructive to public. 1902. p. 137 .....	A29.3:31
Yerby, M. H., short biography of. 1900. p. 539.....	A29.6:28
Chagres River:	
Ratio of discharges of, to rainfall (Abbot). 1899. p. 541 .....	A29.6:27
Upper, rainfall and drainage in (Abbot). 1900. p. 243.....	A29.6:28
Chalcididae:	
North American, from collections of Department of Agriculture and of C. V. Riley, descriptions of, with biological notes, and list of described North American species of family (Howard). 1885 .....	A9.3:5
Pupation among, methods of (Howard). 1891. p. 193 .....	A9.7:4
<i>See also</i> Aphelininae.	
Chamberlain, W. J. Crop reports, national and international, paper on. 1882. p. 137 .....	A1.8:22
Chambers's index of Tineina of U. S., steps toward revision of. <i>See</i> Walsingham, Lord.	
Champaign, Ill.:	
Swine plague at (Detmers). 1879. p. 19.....	A1.6:12
Texas cattle fever investigations in (Detmers). 1880. p. 291....	A1.6:34
Chance, Edward Mackay. <i>See</i> , as collaborator, Bigelow, Willard Dell.	
Chancellor, Charles Williams. Havre, France, cost of hauling farm products over wagon roads at. p. 3.....	A22.4:27
Chandler, A. E. Duty of water in Tule River Basin, California. 1902. p. 159 .....	A10.3:119
Chandler, A. J. Anthrax and southern cattle fever among California cattle. p. 450 .....	A4.1:887-8
Chandler, William Eaton. Address of, before convention of National League for Good Roads, Washington. 1893. p. 15....	A10.3:14
Changa or mole cricket in Porto Rico (Barrett). 1902.....	A10.12:2
Channel Islands: the people and their cattle (Hazard). p. 77 .....	A1.8:22
Chappel, George M. Weather-forecast distribution: should wording of forecasts be confined to vocabulary of present logotype outfit? Is it advisable to extend vocabulary of logotype outfit? 1899. p. 49 .....	A29.3:24
Char. <i>See</i> Wood char.	

# Index

	Classification no.
Charbon. <i>See</i> Anthrax.	
Charles, Vera K. <i>See</i> , as joint author, Pieters, Adrian John.	
Charleston, S. C., hurricanes at, notes on, 1752-1893 (Abbe). 1901. p. 548.....	A29.6:28
Charlottesville, Va.:	
Grapevine, downy mildew and black rot of, treatment of, with salts of copper at, in 1887 (Lyman). p. 5 .....	A6.3:5
same, 1888 (Lyman). p. 20 .....	A6.3:10
San José scale at (Schwarz). 1894. p. 247.....	A9.7:6
Jefferson Memorial and Interstate good-roads convention, letter of invitation and official call to. 1902.....	A22.2:C38
Charpentier de Cossigny, M. J.:	
Agricultural hydraulics; translated by Mrs. A. F. Wood. 1891. pt. 1. p. 349.....	A15.2:Ir7 <sup>2</sup>
Irrigation theories and practices. 1891. p. 268.....	A15.2:P94 <sup>1</sup>
Charts of atmosphere humidity, notes on (Abbe). 1901. p. 118...	A29.6:29
Chauveau, A. B. Electricity, atmospheric, methods and instruments of precision for study of. 1895. p. 569.....	A29.3:11 <sup>2</sup>
Chauzit, B. Grapevine, downy mildew of, treatment for, in France in 1887. p. 75.....	A6.3:5
Chavez, Augustin M., short biography of. 1902. p. 451.....	A29.6:30
Chayote; a tropical vegetable (Cook). 1901.....	A6.3:28
Cheat. <i>See</i> Chess.	
Cheese:	
American, deterioration of. p. 384 .....	A4.1:889-90
Bacteria cultures, pure, for making. p. 26 .....	A1.9:92
Colored spots in (Pearson). p. 229 .....	A4.1:898
same.....	A4.4:24
Cream in, substitute for. 1874. p. 536 .....	A27.9:12
Curd inflation; its relation to bacterial flora of foremilk (Bolley). 1896. p. 78 .....	A10.3:30
Curd test in making. 1898. p. 24.....	A1.9:84
Curing of. 1901. p. 27.....	A1.9:144
Curing rooms, construction and cooling of. 1899. p. 19 .....	A1.9:97
Factory for, and how it is made (Merry). 1896. p. 45 .....	A4.3:15
same, reprinted. n. d. ....	A4.4:19
Fat in, determination of (Van Slyke). 1893. p. 116 .....	A7.3:38
Good, how to select (Alvord). 1896.....	A4.4:11
Industry of State of New York (Gilbert). 1896 .....	A4.3:15
Insects affecting (Howard). 1896. p. 100 .....	A9.6:4
Making at high altitudes in France. 1875. p. 127.....	A27.9:13
Manufacture and consumption of (Alvord). 1895. p. 453 .....	A1.10:895
Manufacture of, as a staple article of export (Goodale). p. 381 ..	A1.1:863
Market for, in England (Ashby). p. 214.....	A4.1:899
National standard for (Eberman). 1893. p. 60 .....	A7.3:41
Oleomargarine. 1874-75. p. 459.....	A27.9:13
Production of, information relative to (Curtis). 1870. p. 355 ...	A27.9:8
Production statistics of butter and. 1873. p. 279.....	A27.9:11
Roquefort, manufacture of. 1868. p. 40.....	A27.9:6
Skipper (Murtfeldt). 1893. p. 170.....	A9.7:6
Small, note on. 1876. p. 111.....	A27.9:14
<i>See also</i> Casein — Filled cheese — New York State Cheese Manufacturers' Association.	
Chemical analysis:	
Agricultural, explanation of some new forms of apparatus used in (Wiley). 1890. p. 96 .....	A7.3:28
Edible oils and fats, methods of (Tolman). 1901 .....	A7.2:Oi5
same (Tolman). 1902. p. 20 .....	A7.3:65
Grapes (Wetherill). 1862.....	A1.8:3
Methods of, of commercial fertilizers, feeding stuffs, dairy prod- ucts, and fermented liquors, adopted by Association of Official Agricultural Chemists—	
2d annual convention, 1885.....	A7.3:7
3d annual convention, 1886. p. 49.....	A7.3:12
4th annual convention, 1887. p. 59.....	A7.3:16
5th annual convention, 1888. p. 57.....	A7.3:19
6th annual convention, 1889.....	A7.3:24



**Chemical analysis—Continued**

**Methods of, etc.—Continued**

7th annual convention, 1890. p. 189.....	A7.3:28
8th annual convention, 1891. p. 179.....	A7.3:31
9th annual convention, 1892. p. 195.....	A7.3:35
10th annual convention, 1893. p. 169.....	A7.3:38
11th annual convention, 1894. p. 341.....	A7.3:43
12th annual convention, 1895, edited by Harvey W. Wiley, with collaboration of L. L. Van Slyke and W. D. Bigelow.	A7.3:46 <sup>1</sup>
15th annual convention, 1898, edited by Harvey W. Wiley ...	A7.3:46 <sup>2</sup>
changes and additions, Dec. 12, 1896 .....	A7.4:2
changes and additions, Dec. 11, 1897 .....	A7.4:4
outline of. 1901.....	A7.4:7
provisional methods, at 18th annual convention, 1901, edited by Harvey W. Wiley, with collaboration of W. D. Bigelow.	A7.3:65
<i>See also</i> Tanning materials.	
Proximate, notes on (McMurtrie). 1873. p. 167.....	A27.9:11
<i>See also</i> Alkali soils—Cattle foods—Food materials—Fort Scott— Fruits—Fungicides—Insecticides—Plants—Soils.	
Chemical exhibit. <i>See</i> Chicago, Ill., World's Columbian Exposition.	
Chemical fertilizers. <i>See</i> Fertilizers.	
Chemical measuring flasks, testing of, notice in regard to. 1897. p. 159.	A7.3:51
Chemical memoranda on agricultural subjects, monthly, Nov.—Dec., 1871. p. 480 .....	A27.9:9
Same (Smith), Jan., 1872; (Brown), Feb.—Dec., 1872.....	A27.9:10
Same (McMurtrie), Jan., 1873, to Dec., 1876.....	A27.9:11-14
Chemical Society, national, committee on, of Association of Official Agriculturist Chemists, report of—	
1890. p. 182 .....	A7.3:28
1891. p. 165 .....	A7.3:31
Chemicals, weed destruction by means of (Evans). 1901. p. 19 ...	A1.9:124
<i>See also</i> Enzymes.	
Chemistry:	
Abstracts of reports of agricultural experiment stations on. 1889-1902 .....	A10.6:
For technical and practical students (Huston). 1896. p. 88 ....	A10.3:41
Relation of, to progress of agriculture (Wiley). p. 201 .....	A1.10:899
<i>See also</i> Agricultural chemistry—Alkali—Cotton.	
Chemistry and economy of food, methods and results of investiga- tions on (Atwater). 1895 .....	A10.3:21
Chemistry section, Association of American Agricultural Colleges and Experiment Stations, report of:	
1890, pp. 23, 108, 132 .....	A10.5:3
1891, p. 20 .....	A10.3:7
1892, p. 36 .....	A10.3:16
<i>See also</i> Agriculture and chemistry section.	
Chemistry Bureau, Agriculture Department:	A7.
Exhibit of, at Pan-American Exposition, Buffalo, N. Y., 1901 (Ewell and others). 1901.....	A7.3:63
Publications of. 1899 .....	A7.2:P96
Work of, for farmer (Wiley). 1897. p. 76 .....	A1.10:897
Chemists, Official Agricultural, Association of:	
Historical sketch of (Wiley). 1899. p. 16.....	A7.3:57
2d annual convention, 1885, proceedings of, edited by Charles W. Dabney.....	A7.3:7
3d annual convention, 1886, proceedings of, edited by Clifford Richardson.....	A7.3:12
4th annual convention, 1887, proceedings of, edited by Clifford Richardson.....	A7.3:16
5th annual convention, 1888, proceedings of, edited by Clifford Richardson.....	A7.3:19
6th annual convention, 1889, proceedings of, edited by Harvey W. Wiley .....	A7.3:24
7th annual convention, 1890, proceedings of, edited by Harvey W. Wiley.....	A7.3:28
8th annual convention, 1891, proceedings of, edited by Harvey W. Wiley.....	A7.3:31

# Index

	Classification no.
Chemists, Official Aæricultural, Association of—Continued	
9th annual convention, 1892, proceedings of, edited by Harvey W. Wiley .....	A7.3:35
same, report on. p. 115 .....	A10.6:4
10th annual convention, 1893, proceedings of, edited by Harvey W. Wiley .....	A7.3:38
11th annual convention, 1894, proceedings of, edited by Harvey W. Wiley .....	A7.3:43
same, report on. p. 178 .....	A10.6:8
12th annual convention, 1895, proceedings of, edited by Harvey W. Wiley .....	A7.3:47
same, report on. p. 263 .....	A10.6:7
13th annual convention, 1896, proceedings of, edited by Harvey W. Wiley .....	A7.3:49
same, report on (Beal). p. 272 .....	A10.6:8
14th annual convention, 1897, proceedings of, edited by Harvey W. Wiley .....	A7.3:51
same, report on (Beal). p. 404 .....	A10.6:9
15th annual convention, 1898, proceedings of, edited by Harvey W. Wiley .....	A7.3:56
same, report on (Beal). p. 504 .....	A10.6:10
16th annual convention, 1899, proceedings of, edited by Harvey W. Wiley .....	A7.3:57
same, report on (Allen). p. 204 .....	A10.6:11
17th annual convention, 1900, proceedings of, edited by Harvey W. Wiley .....	A7.3:62
same, report on (May). p. 503 .....	A10.6:12
18th annual convention, 1901, proceedings of, edited by Harvey W. Wiley .....	A7.3:67
same, report on (May). p. 406 .....	A10.6:13
19th annual convention, 1902, report on (Lawson). p. 107 .....	A10.6:14
Chenery, Winthrop W.:	
Holstein cattle. p. 161 .....	A1.1:864
"Texel" or "Mouton Flandrin" sheep. p. 242 .....	A1.1:864
Cherries, food value of (Langworthy). 1899. p. 22 .....	A1.9:105
Cherry Hill, N. J. Tornado at, report of (Emery). 1895. p. 252 ..	A29.6:23
Cherry leaves, wild, poisoning by (Evans). p. 16 .....	A1.9:103
Cherry tree, black knot of (Peck). p. 175 .....	A1.1:872
same (Taylor). 1874. p. 52 .....	A27.9:12
Chesnut, Victor King:	
Plants poisonous to stock, preliminary catalogue of. p. 387 .....	A4.1:898
Plants used by Indians of Mendocino County, California. 1902. p. 295 .....	A6.5:7
Poisonous plants—	
principal, of U. S. 1898 .....	A6.3:20
some, of northern stock ranges. 1900. p. 305 .....	A1.10:900
some common. 1896. p. 137 .....	A1.10:896
thirty, of U. S. 1898 .....	A1.9:86
Chesnut, Victor King, and Wilcox, Earley Vernon. Stock-poisoning plants of Montana, preliminary report. 1901 .....	A6.3:26
Chess, seeds of (Hillman). 1902 .....	A19.3:R31
Chestnut borer, two-lined, circular relative to (Chittenden). 1897 ..	A9.5:24
Chestnut oak for railroad ties, circular on (Colman). 1887 .....	A13.4:4
Chestnut trees:	
Decay of, in North Carolina. 1867. p. 58 .....	A27.9:5
Insect injury to, in Virginia and neighboring States (Chittenden). 1897. p. 67 .....	A9.6:7
Chestnuts, culture of (Smith and Langworthy). 1900. p. 9 .....	A1.9:114
Chester, Frank Dyer. Copper salts as fungicides. 1891. p. 21 ....	A28.5:6
Chicago, Ill.:	
Ancient climates near (Abbe). 1895. p. 424 .....	A29.6:23
Climate of (Hazen). 1893 .....	A29.3:10
Corn and wheat in. 1861-66. p. 431 .....	A27.9:4
Dietary studies in, in 1895 and 1896, conducted with cooperation of Jane Addams and Caroline L. Hunt of Hull House (Atwater and Bryant). 1898 .....	A10.3:55

**Chicago, Ill.—Continued**

Farm animals at, range or average price of—	
1897 and 1898. p. 579.....	A4.1:898
1899. p. 673 .....	A4.1:899
1900. p. 569 .....	A4.1:900
Growth of the Northwest and. 1864. No. 2. p. 32 .....	A27.9:2
Horse show of 1890 (Martin). 1891. p. 349 .....	A4.1:889-90
Horses from, export of (Bruette). 1897. p. 84 .....	A1.2:H78
Live stock and meat traffic of (Perry). p. 245.....	A4.1:884
Live stock at, range of prices of. p. 240.....	A4.1:897
Live stock receipts and shipments—	
1868. p. 21 .....	A27.9:7
1869. pp. 239, 300*, 371 .....	A27.9:7
same. p. 45.....	A27.9:8
1870. p. 282 .....	A27.9:8
same. p. 19.....	A27.9:9
1871. p. 89 .....	A27.9:10
1872. p. 402 .....	A27.9:10
Lumber trade at, 1857-68. p. 62.....	A27.9:7
Precipitation at, 1889-91. p. 108.....	A29.6:20
Pork-packing in, 1867. p. 372.....	A27.9:5
Railroad freights from, 1866. p. 27.....	A27.9:4
Trade of, 1867-68. p. 20 .....	A27.9:7
Union stock yards in, southern cattle fever at (Trumbower). p. 444 .....	A4.1:884
Weather forecast district, monthly report of—	
Sept., 1898-May, 1899 (Cox) .....	A29.6:
June, July, 1899 (Beals) .....	A29.6:27
Sept.-Nov., 1899 (Cox).....	A29.6:27
Dec., 1899 (Beals) .....	A29.6:27
Jan.-June, 1900 (Cox) .....	A29.6:28
July, 1900 (Bigelow) .....	A29.6:28
Sept., 1900-March, 1901 (Cox) .....	A29.6:28, 29
Apr., 1901 (Walz) .....	A29.6:29
May, June, 1901 (Cox) .....	A29.6:29
July, 1901 (Walz) .....	A29.6:29
Sept., 1901 (Cox) .....	A29.6:29
Oct., 1901 (Walz) .....	A29.6:29
Nov., 1901-March, 1902 (Cox) .....	A29.6:29, 30
Apr., 1902 (Walz).....	A29.6:30
May-Oct., 1902 (Cox) .....	A29.6:30
Chicago, Ill., International Live Stock Exposition, 1900:	
Canadian cattle, sheep, and swine for exhibition at, special order, providing for importation of—	
July 13, 1900 .....	A4.5:67
Sept. 12, 1901.....	A4.5:90
July 16, 1902 .....	A4.5:96
Report on (Wilson and Hill). p. 63 .....	A4.1:900
Chicago, Ill., International Meteorological Congress, August 21-24, 1893:	
Proceedings of (Fassig). 1894. p. 227 .....	A29.6:21
Report on (Fassig).. 3 parts .....	A29.3:11
Chicago, Ill., National Convention of Cattle Breeders and Other Stockmen, called to consider subject of contagious diseases of domestic animals—	
[1st], Nov., 1883, proceedings of .....	A1.8:29
[2d], Nov., 1884, proceedings of.....	A1.8:33
[3d], Nov., 1885, addresses before, by Norman J. Colman and D. E. Salmon .....	A1.8:38
Chicago, Ill., National Good Roads and Irrigation Congress, letter of invitation to. 1900 .....	A22.2:C43
Chicago, Ill., World's Agricultural Congress, report of committee on (Morrow). 1893. p. 104.....	A10.3:16
Chicago, Ill., World's Columbian Exposition, 1893:	
Agricultural colleges and experiment stations, collective exhibit of circulars relative to.....	A10.2:C43

\* By a misprint, this page number appears twice.

# Index

Classification no.

## Chicago, Ill., World's Columbian Exposition, 1893—Continued

Agricultural experiment stations, cooperative exhibit at, report of committee on—	
1891 (Harris). p. 43 .....	A10.5:3
1892 (Armsby). p. 24 .....	A10.3:7
1893 (Armsby). p. 99 .....	A10.3:16
1893 (Alvord). p. 103 .....	A10.3:16
1894 (Armsby). p. 34 .....	A10.3:20
Apiarian exhibit at (Benton). 1894. p. 242 .....	A9.7:6
Cereals collected at, analyses of (Wiley). 1895 .....	A7.3:45
Chemical exhibit at, report of committee of Association of Official Agricultural Chemists on. 1891. p. 170 .....	A7.3:31
Dairy tests at, report of committee on (Scovell). 1894. p. 52 .....	A10.3:20
Entomology, economic, catalogue of exhibit at .....	A9.3:31
Insect collections of (Chittenden). 1894. p. 236 .....	A9.7:6
Insects occurring in foreign exhibits of (Riley). 1894. p. 213 .....	A9.7:6
same, destruction of (Chittenden). 1894. p. 225 .....	A9.7:6
Special report of assistant secretary on. p. 53 .....	A1.1:893
same .....	A5.1:893
Chick-pea. <i>See</i> Gram.	
Chickamauga National Park, forestry report on. p. 321 .....	A1.1:892
Same, p. 321 .....	A13.1:892
Chicken cholera, experiments with. p. 211 .....	A1.6:22
<i>See also</i> Fowl cholera.	
Chicken tick, note on (Hassall). p. 496 .....	A4.1:899
Chickens:	
Animal parasites of, check list of (Hassall). 1896 .....	A4.4:9
Apoptectiform septicemia in (Nørgaard and Mohler). 1902 .....	A4.3:36
Different breeds of, weights of eggs of (Emery). p. 474 .....	A4.1:899
Gape disease of. 1898. p. 28 .....	A1.9:84
Ground grain vs. whole grain for. p. 19 .....	A1.9:84
Standard varieties of (Howard). 1896. p. 445 .....	A1.10:896
same .....	A1.9:51
Young, skim milk for. 1898. p. 20 .....	A1.9:84
same (Anderson). p. 477 .....	A4.1:899
<i>See also</i> Chinese incubators—Poultry.	
Chickens and their diseases in Hawaii (Sedgwick). 1901 .....	A10.9:1
Chicory growing as an addition to resources of the American farmer (Kains). 1898 .....	A6.3:19
Same, circular on (Kains). 1900 .....	A6.4:29
Chilcott, Ellery Channing, and Burnett, E. A. Mutton, feeding for, in South Dakota. p. 471 .....	A4.1:898
Childs, O. W. Rainfall in Nicaragua, record of. 1850–51. p. 409 .....	A29.6:26
Chile, agriculture of. 1891. p. 285 .....	A27.9:29
Chilo saccharalis in New Mexico (Townsend). 1891. p. 24 .....	A9.7:4
China:	
Agriculture in. 1893. p. 23 .....	A27.9:32
Ailanthus silkworm of, additional observations on (Morris). p. 390 .....	A1.1:862
Locusts in, in 1878. App. p. 65 .....	A8.1:3
same, extermination of (Scatchkow). App. p. 65 .....	A8.1:3
Our trade with. 1889–99. (Hitchcock) .....	A12.3:18
San José scale in, résumé of search for native home of. 1902. p. 65 .....	A9.6:37
Treaty of Shimonoseki, between Japan and, Apr. 17, 1895, and possibilities of U. S. trade with .....	A12.4:5
<i>See also</i> Amoy—Indo-China—and headings beginning Chinese.	
China grass. <i>See</i> Ramie.	
Chinch bug:	
Destruction of, in field by artificial introduction of contagious diseases (Snow). 1891. p. 279 .....	A9.7:3
Disease and other notes (Snow). 1891. p. 69 .....	A9.7:4
Early occurrence of, in Mississippi Valley (Forbes). 1889. p. 249 .....	A9.7:1
Experiments for destruction of, in field by artificial introduction of contagious diseases (Snow). 1891. p. 145 .....	A10.5:3
Experiments on (Forbes). 1883. p. 23 .....	A9.3:2
Hibernation of (Marlatt). 1894. p. 232 .....	A9.7:7

<b>Chinch bug—Continued</b>	
History of (Howard). p. 51 .....	A1.1:887
same. 1888 .....	A9.3:17
Interesting outbreak of, in northern Ohio. 1899. p. 55 .....	A9.6:20
Its probable origin and diffusion, its habits and development, natural checks and remedial and preventive measures, with mention of habits of allied European species. 1898 .....	A9.6:15
Observations in Iowa in 1894 (Osborn). 1894. p. 230 .....	A9.7:7
Ohio outbreak of, three years' study of (Webster). 1896. p. 18..	A9.6:6
Remedies for (Glover)—	
1875. p. 442 .....	A27.9:13
1881. p. 87 .....	A1.1:881-2
1882. p. 87 .....	A9.1:882
<b>Chincha. See Skunks.</b>	
Chinese and fruitarians, nutrition investigations among, at California Agricultural Experiment Station, 1899-1901 (Jaffa). 1901.....	A10.3:107
Chinese incubators (Brill). p. 247.....	A4.1:900
Chinese labor in agriculture. p. 572 .....	A1.1:870
<b>Chinese tea-plant or thea virdis:</b>	
Cultivation and manufacture of tea from, in U. S., practicability of. p. 349.....	A1.1:877
Practicability of its culture and manufacture in U. S. 1877.....	A1.6:3
same. (2d p. 26).....	A1.2:An7 <sup>2</sup>
Chinese vegetable food materials, their nutritive and economic value, description of (Blasdale). 1899.....	A10.3:68
<b>Chinook winds:</b>	
Description of (Garriott). 1892. p. 23 .....	A29.6:20
same (Glass). 1902. p. 41 .....	A29.3:31
Havre, Mont., notes on (Abbe). 1898. p. 568.....	A29.6:26
History of (Burrows). 1901. p. 555 .....	A1.10:901
How they came to Montana in 1896 (Coe). p. 413.....	A29.6:24
Iowa, notes on (Abbe). 1897. p. 545 .....	A29.6:25
Montana (Abbe). 1895. p. 426.....	A29.6:23
Oregon, report of (Pague). 1896. p. 460.....	A29.6:24
Chinook and signs of its approach, note on (Abbe). 1897. p. 213..	A29.6:25
Chinooks and hot winds (Abbe). 1894. p. 77 .....	A29.6:22
Chinooks versus kuro siro, notes on (Abbe). 1898. p. 114 .....	A29.6:26
Chionobas (oeneis) macounii, preliminary notes upon (Fletcher). 1889. p. 45 .....	A9.7:2
Chipman, A. J. Rocky Mountain locust in Kansas and Colorado in 1880. App. p. 55 .....	A8.1:3
<b>Chittenden, Frank Hurlbut:</b>	
Agrilus, North American species of, food plants and injury of. 1900. p. 64 .....	A9.6:22
Apple-tree borers, larger .....	A9.5:32
Asparagus, insects that affect. 1898. p. 54 .....	A9.6:10
Asparagus beetles. 1896. p. 341 .....	A1.10:896
Bean leaf-beetle, report on. 1897. p. 64.....	A9.6:9
Beans and peas, insects injurious to. p. 233.....	A1.10:898
Beetles, certain imported, distribution of. 1895. p. 326 .....	A9.7:7
Birch trees, destructive borer, enemy of. 1898. p. 44 .....	A9.6:18
Bronze apple-tree weevil. 1900. p. 37 .....	A9.6:22
Cereals, stored, and other products in Mexico, insects affecting. 1896. p. 27 .....	A9.8:4
Cereals and other dry vegetable foods, insects affecting. 1896. p. 112 .....	A9.6:4
Chestnut and pine trees in Virginia and neighboring States, insect injury to. 1897. p. 67 .....	A9.6:7
Chestnut borer, two-lined, circular on. 1897 .....	A9.5:24
Chicago, Ill., World's Columbian Exposition, 1893—	
destruction of insects occurring in foreign exhibitions. 1894. p. 225 .....	A9.7:6
insect collections of. 1894. p. 236 .....	A9.7:6
Coleopterous enemies of grapevine, some. 1895. p. 384.....	A9.7:7
Cucumber beetle, notes on. 1898. p. 27.....	A9.6:10
Fall army worm and variegated cutworm. 1901 .....	A9.6:29
Flea-beetle living on purslane. 1898. p. 83.....	A9.6:18



# Index

	Classification no.
Chittenden, Frank Hurlbut—Continued	
Fruit-tree bark-beetle, circular on. 1898 .....	A9.5:29
Garden and orchard crops, some insects injurious to. 1899 .....	A9.6:19
Garden crops, insects injurious to. 1900 .....	A9.6:23
Grain, stored, insects injurious to. 1896 .....	A1.9:45
Grain, stored, more important insects injurious to. 1894. p. 277....	A1.10:894
Green clover worm. 1901. p. 45 .....	A9.6:30
Green pea louse, destructive, circular on. 1901 .....	A9.5:43
Herbivorous habits of certain dermestidæ. 1895. p. 36 .....	A9.6:2
Horse-radish flea-beetle, report of. 1895. p. 404 .....	A9.7:7
Hymenopterous parasites of Coleoptera, observations on some. 1893. p. 247 .....	A9.7:5
Insects, principal injurious, in 1901. p. 674 .....	A1.10:901
Insects and weather; observations during season of 1899. p. 51..	A9.6:22
same. 1900. p. 63 .....	A9.6:30
Languria, notes on. 1890. p. 346 .....	A9.7:2
Leaf-mining locust beetle, with notes on related species. 1902. p. 70 .....	A9.6:38
Leaf-tyer of grape and elderberry. 1898. p. 82 .....	A9.6:18
Mediterranean flour moth, development of. 1896. p. 85 .....	A9.6:6
Millet, insect injury to. 1898. p. 84 .....	A9.6:17
Palm and palmetto weevils. 1902. p. 23 .....	A9.6:38
Plants, useful, certain species of Coleoptera that attack, notes on. 1897. p. 20 .....	A9.6:9
Potato-bud weevil, report of. 1895. p. 350 .....	A9.7:7
Rhinoceros beetle, notes on. 1902. p. 28 .....	A9.6:38
Rose-chaffer, circular on. 1895 .....	A9.5:11
Rose leaf-beetle, report on. 1897. p. 60 .....	A9.6:7
Squash bug, common, circular on. 1899 .....	A9.5:39
Squash-vine borer, circular on. 1899 .....	A9.5:38
Strawberry weevil—	
circular on. 1897 .....	A9.5:21
habits and remedies, supplementary notes on. 1894. p. 14 ..	A9.7:7
injuries and bibliography, notes on. 1898. p. 82 .....	A9.6:10
report of. 1893. p. 167 .....	A9.7:5
Striped cucumber beetle. 1898 .....	A9.5:31
Tobacco flea-beetle, report on. 1898. p. 79 .....	A9.6:10
Tobacco-stalk weevil. 1902. p. 66 .....	A9.6:38
Twig pruners and allied species. 1898. p. 35 .....	A9.6:18
Vegetable crops, some insects injurious to. 1902 .....	A9.6:33
Vegetable products, stored, insects affecting, collection of articles on some little-known. 1897 .....	A9.6:8
Violet, rose, and other ornamental plants, some insects injurious to. 1901 .....	A9.6:27
White pine, insect enemies of. 1899. p. 55 .....	A13.3:22
Chittenden, H. M. Road system, Government, of Yellowstone National Park. 1901. p. 72 .....	A22.3:21
Chlorin. <i>See</i> Proteid matters.	
Choate, A. B.:	
Address of, before Minnesota good roads convention, Jan., 1894. pp. 5, 11 .....	A22.3:2
State aid to road building in Minnesota. 1898 .....	A22.4:32
Cholera, report relative to. 1866. pp. 56, 127 .....	A27.9:4
<i>See also</i> Chicken cholera — Fowl cholera — Hog cholera.	
Chowen, W. S. Address of, before Minnesota good roads conven- tion, Jan., 1894. p. 13 .....	A22.3:2
Chwolson, Orest. <i>See</i> Schwolson.	
Chree, Charles. Aneroid barometer, report on. 1898. p. 547 .....	A29.6:26
Christian, George L. Address of, before Virginia good roads con- vention, Oct. 18, 1894. p. 8 .....	A22.3:11
Chronological cycles, note on (Abbe). 1900. p. 557 .....	A29.6:28
Chrysalis, curious, report of. 1892. p. 131 .....	A9.7:5
Chubbuck, Levi. Dairy industry in Missouri and Kansas. 1897....	A4.3:18
Chufa, or earth almond, cultivation of. 1876. p. 37 .....	A27.9:14
Churches, relation of, to State colleges and universities (Harris). 1899. p. 100 .....	A10.3:65



**Index**  
Classification no.

Cicada, periodical, or seventeen-year locust:	
Account of Cicada septendecim, its natural enemies, and means of preventing its injury, with summary of distribution of different broods (Marlatt). 1898 .....	A9.6:14
Broods of, new nomenclature for (Marlatt). 1902 .....	A9.5:45
Circular on—	
1897 (Schwarz) .....	A9.5:22
1898 (Schwarz) .....	A9.5:30
1902 (Hunter) .....	A9.5:44
Consideration of validity of old records bearing on distribution of broods of, with particular reference to occurrence of broods VI and XXIII in 1898 (Marlatt). 1898. p. 59 .....	A9.6:18
Feeding habits of adults of (Quaintance). 1902. p. 90.....	A9.6:37
Forecast for 1894 (Riley) .....	A9.2:P41
New nomenclature for broods of (Marlatt). 1898. p. 52.....	A9.6:18
Present year's appearances of. 1893. p. 298 .....	A9.7:5
Report on (Riley). 1885.....	A9.3:8
Southeastern Indiana. 1886. p. 24.....	A9.3:12
Cicindela limbata, report on (Bruner). 1889. p. 144.....	A9.7:2
Cider:	
Address on, before Association of Official Agricultural Chemists, 1901 (Alwood). p. 84.....	A7.3:67
Adulteration of (Crampton). 1887. p. 263 .....	A7.3:13 <sup>3</sup>
American, composition of, and substances used in adulteration (Crampton). p. 183 .....	A1.1:887
Sweet, preservation of. 1898. p. 29.....	A1.9:78
Cigar-leaf tobacco:	
Cultivation of, in Florida (Floyd). 1899.....	A1.8:62
Curing and fermentation of (Loew.). 1899.....	A1.8:59
Temperature changes in fermenting piles of (Whitney and Means). 1899.....	A1.8:60
<i>See also</i> Tobacco.	
Cigar-wrapper leaf, methods of experimenting with (Jenkins). 1901. p. 102.....	A10.3:99
Cimbex, American, adults of, injuring willow and cottonwood in Nebraska (Webster). 1890. p. 228 .....	A9.7:2
Cinchona:	
Cultivation of—	
in United States (Antisell). p. 454 .....	A1.1:866
in India. 1870. p. 285.....	A27.9:8
Note on. 1864. No. 1. p. 27.....	A27.9:3
Planting of, in Jamaica (Parry). 1871. p. 120.....	A27.9:9
Cincinnati, Ohio:	
Hogs packed at, 1833-64. No. 6. p. 33.....	A27.9:2
Pork-packing in, 1833-67. p. 52.....	A27.9:5
Cipher code, international, for correspondence respecting the aurora and related conditions (Veeder). 1894. p. 26 .....	A29.3:11 <sup>1</sup>
Cipher code of wind-signal orders, amending instructions to special-display men. 1892 .....	A29.2:C49
Circle City, Alaska, meteorological observations near, 1896-98 (Holt). p. 542 .....	A29.6:26
Circumscissa. <i>See</i> Cercospora circumscissa.	
Cirencester, England, Royal Agricultural College at, report on. 1885. p. 70.....	A1.8:36
Cist, Charles. Hog and its products. p. 382 .....	A1.1:866
Cities:	
Industries of. 1884. No. 8. p. 26 .....	A27.9:22
Milk supply of. p. 332 .....	A1.1:872
Sewage of (Brown). 1872. p. 379 .....	A27.9:10
Cities and towns, weeds in (Dewey). 1898. p. 193 .....	A1.10:898
Citrate-soluble phosphoric acid. <i>See</i> Guanos—Phosphoric acid.	
Citric acid, action of, on basic slag (Huston and Jones). 1896. p. 68..	A7.3:49
Citric acid in milk, report on (Soulhet). 1889. p. 155 .....	A7.3:24
Citron, culture of (Redden). p. 147.....	A1.1:867
Citrus fruits, principal diseases of, in Florida (Swingle and Webber). 1896 .....	A28.3:8
<i>See also</i> Orange.	

# Index

	Classification no.
Citrus trees, scale insect and mite enemies of (Marlatt). 1900. p. 247.	A1.10:900
Civil Service:	
Examinations—	
assistants in Department of Agriculture (Abbe). 1898. p. 564 .....	A29.6:26
Weather Bureau employees (Abbe). 1898. p. 63 .....	A29.6:26
weather observers in U. S. Weather Bureau (Kimball). 1898. p. 548 .....	A29.6:26
Letters relative to classified service, etc., in Agriculture Department .....	A1.2:C49 <sup>1</sup>
Report on, in Agriculture Department. 1896 .....	A1.4:5
same (Dabney). 1897 .....	A10.4:33
Clam, long, rapid disappearance of (Beal). 1898. p. 19 .....	A1.9:103
Clark, H. C. Meat industries of United States, report accompanying exhibit of Animal Industry Bureau, at Paris Exposition. 1889. p. 359 .....	A4.1:887-8
Clark, Josephine Adelaide:	
Agricultural College libraries. 1902. p. 25 .....	A10.3:115
Mushrooms, edible and poisonous, reference list of publications relating to. 1898 .....	A17.3:20
Phanerogams and Pteridophytes, North American, new species of, published in 1891, systematic and alphabetic index. 1892. p. 151 .....	A6.5:1
same, published in 1892. p. 233 .....	A6.5:1
<i>See also</i> , for reports as Librarian, Library, Agriculture Department, 1901, 1902 .....	A17.1:
Clark, V. A.:	
Apples, keeping qualities of. 1900. p. 16 .....	A1.9:119
Apples, storing without ice. 1900. p. 5 .....	A1.9:119
Cold storage on the farm. 1900. p. 9 .....	A1.9:119
Corn, sweet, and pole beans, forcing of, under glass. 1898. p. 13 .....	A1.9:105
Fruit, mechanical cold storage for. 1900. p. 12 .....	A1.9:119
Fruit trees, close root pruning of. p. 13 .....	A1.9:103
Garden crops, fertilizers for. 1898. p. 12 .....	A1.9:105
Plums, cross-pollination of. 1899. p. 6 .....	A1.9:103
<i>See also</i> , as joint author, True, Alfred Charles.	
Clarke, J. W. Fruit gathering, ripening and keeping. p. 152 .....	A1.1:864
Clarke, Lowell. Lamb feeding in Colorado. p. 275 .....	A4.1:901
Claxton, T. F.:	
Mauritius cyclone of Dec. 5, 1897. p. 62 .....	A29.6:26
Thunderstorms, two, at Royal Alfred Observatory, Mauritius. 1900. p. 63 .....	A29.6:28
Clay, John, jr. Breeder, work of, in improving live stock. p. 627 .....	A1.10:899
Clay:	
Filtration of, from soil solutions, capillary studies and. 1902 .....	A26.3:19
Suspended, filtration of, from soil solutions (Briggs). 1902. p. 31 .....	A26.3:19
Clayton, H. H.:	
Cloud observations at Blue Hill. 1897. p. 135 .....	A29.6:25
Clouds, different, forms of, mean heights and velocities of. 1892. p. 50 .....	A29.6:20
Clearing new land (Williams). 1902 .....	A1.9:150
Clematis, decay in, <i>Phytomyza affinis</i> , as cause of (Bos). 1893. p. 92 .....	A9.7:6
Clement, A. W. Pneumonia among horses. p. 381 .....	A4.1:889-90
Clermont-Ferrand, France, International Hydrological, Climatological, and Geological Congress, Sept. 28 to Oct. 2, 1896 (Rotch). p. 367 .....	A29.6:24
Cleveland, Ohio. <i>See</i> St. Ignatius College.	
Clift, J. W. Road improvement, requisites to. 1902. p. 26 .....	A22.3:23
Climate:	
Alaska (Henry). 1897. p. 248 .....	A29.6:25
same (Moore). 1897 .....	A29.2:A11
Ancient, near Chicago (Abbe). 1895. p. 424 .....	A29.6:23
Antigua, W. I., seasonal variations in 1890-1900 (Kimball). p. 168 .....	A29.6:29
Appalachians, southern (Henry). p. 143 .....	A1.2:Ap4 <sup>2</sup>
Arkansas, southwestern, 1840-67. p. 429 .....	A27.9:8

**Climate—Continued**

Athens, notes on (Abbe). 1898. p. 554.....	A29.6:26
Baguio, Philippine Islands (Stetson). 1902. p. 478.....	A29.6:30
British Islands (Harding). 1896. p. 611.....	A29.3:11 <sup>s</sup>
California (Irish). 1895. p. 475.....	A1.10:895
Canada. <i>See</i> Canada, climatological data.	
Changes in local (Abbe). 1897. p. 491.....	A29.6:25
Colorado, and its effect on trees (Parsons). 1888. p. 221.....	A13.3:2
Conflict of man with, notes on (Abbe) 1899. p. 257.....	A29.6:27
Controlling factor in long-distance transmission of electrical energy (McAdie). 1897. p. 439.....	A29.6:25
Death Valley, Cal. (Harrington). 1892.....	A29.3:1
Denmark (Paulsen). 1896. p. 640.....	A29.3:11 <sup>s</sup>
Florida, statement of products and (Knapp). 1885. No. 19, p. 23.	A27.9:23
Geological ages (Abbe). 1898. p. 313.....	A29.6:26
Georgia (Hemphill). 1882.....	A1.6:47
Glacier as an index of, notes on (Abbe). 1901. p. 177.....	A29.6:29
Harpoor, Turkey in Asia, 1898-1900 (Huntington). 1901. p. 250.	A29.6:29
Hawaii. <i>See</i> Hawaii, climatological data.	
Idaho, some features of (Blandford). 1901. p. 19.....	A29.6:29
Influence of, on animal life (Dean). 1902. p. 107.....	A29.3:31
Jamaica. <i>See</i> Jamaica, climatological data.	
Liberia, notes on (Abbe). 1898. p. 215.....	A29.6:26
Local, influence of small lakes on (Abbe). 1901. p. 563.....	A29.6:29
Maine (Boardman). 1884.....	A1.7:4
Malay Archipelago (Van der Stok). 1896. p. 669.....	A29.3:11 <sup>s</sup>
Mexico. 1894. p. 333.....	A27.9:32
<i>See also</i> Mexico, climatological data.	
Mexico, City of (Bárceña). 1896. p. 601.....	A29.3:11 <sup>s</sup>
Mississippi (Hurt). 1884.....	A1.7:3
Missouri, notes on (Hackett). 1899. p. 582.....	A29.6:27
Netherlands (Snellen). 1896. p. 627.....	A29.3:11 <sup>s</sup>
Norway (Mohn). 1896. p. 647.....	A29.3:11 <sup>s</sup>
Ohio, western. 1868-1870. p. 198.....	A27.9:9
Oregon. 1871. p. 129.....	A27.9:9
Oscillation of, in arid regions, notes on (Abbe). 1900. p. 544.....	A29.6:28
Pacific coast (Merrick). p. 280.....	A1.1:867
Pacific slope (Hilgard). 1892. p. 9.....	A1.8:20
Periodicity in, notes on (Abbe). 1901. p. 511.....	A29.6:29
Permanence of (Sims). 1901. p. 121.....	A29.6:29
same (Abbe). 1901. p. 175.....	A29.6:29
Philippines (Brewer). 1900. p. 102.....	A29.6:28
Publications on, American, note on (Abbe). 1898. p. 461.....	A29.6:26
Puerto Rico (Harrington). 1898. p. 437.....	A29.6:26
Relations of soil to (Hilgard). 1892.....	A29.3:3
St. Lawrence Island, 1894-99 (Henry). p. 457.....	A29.6:27
Santa Barbara, California. 1871. p. 196.....	A27.9:9
South Carolina (Hemphill). 1882.....	A1.6:47
Spokane, Wash., 1882-99 (Stewart). p. 490.....	A29.6:28
Statistics of, 1896, report of (Henry). p. 277.....	A29.1:897
Studies of—	
1899 (Walz). p. 136.....	A29.3:24
1902 (Herrmann). p. 198.....	A29.3:31
1902 (Fassig). p. 200.....	A29.3:31
Texas (Abbe). 1894. p. 331.....	A29.6:21
United States (Hazen). 1896. p. 585 in.....	A29.3:11 <sup>s</sup>
same (Allen). 1896. p. 585.....	A29.3:11 <sup>s</sup>
West Indies (Hall). 1896. p. 589.....	A29.3:11 <sup>s</sup>
<i>See also</i> Arid regions—Climatology—Cold Friday—Cold waves—	
Meteorology—and headings beginning Climate, Climatology,	
Climate and corn, relation of (Wren). 1901. p. 8.....	A29.6:29
Climate and crime, relation between (Abbe). 1897. p. 259.....	A29.6:25
Climate and crop and storm-warning services of Weather Bureau,	
value of, to industries of Cuba and other islands of West Indies	
(Hayes.) 1902. p. 58.....	A29.3:31
same, to Porto Rico (Noyes). 1902. p. 60.....	A29.3:31

# Index

	Classification no.
Climate and crop bulletins.....	A29.7:
Climate and crop conditions, are changes in present forms for reporting weekly, advisable? (Mitchell). 1899. p. 126 .....	A29.3:24
same (Linney). 1899. p. 126 .....	A29.3:24
Climate and crop correspondents, Weather Bureau, how many are required to meet fully the needs of Bureau in its climate and crop service? (Allen.) 1902. p. 195 .....	A29.3:31
<i>See also</i> Climate and crop service.	
Climate and crop sections, Weather Bureau:	
Monthly reports of, extracts from Apr.-Dec. (Abbe). 1898 .....	A29.6:26
Publications of, necessity for binding and otherwise preserving (Belden). 1902. p. 177.....	A29.3:31
Should monthly reports of, contain only original matter? (Love-land). 1902. p. 187 .....	A29.3:31
<i>See also</i> Alaska.	
Climate and crop service:	
Annual summaries of, notes on (Abbe). 1899. p. 254.....	A29.6:27
Porto Rico, notes (Abbe). 1899. p. 258 .....	A29.6:27
Publications of (Berry). 1899. p. 150.....	A29.6:27
Reports, extracts from, Apr., May, Sept., Oct., 1895-Dec., 1902 (Berry) .....	A29.6:
State services (Abbe). 1895. p. 384 .....	A29.6:23
Weekly bulletins, should remarks of correspondents be published?—	
1899 (Hackett). p. 107 .....	A29.3:24
1899 (Marbury). p. 108 .....	A29.3:24
1902 (Glenn). p. 188.....	A29.3:31
<i>See also</i> Weather and crop conditions.	
Climate and crops:	
Notes on (Kimball). 1901. p. 564.....	A29.6:29
Problem with two solutions (Abbe). 1901. p. 419.....	A29.6:29
Secular changes in (Abbe). 1897. p. 211.....	A29.6:25
Climate and flora, notes on (Abbe). 1900. p. 448.....	A29.6:28
Climate and germination (Detmer). 1895. p. 405.....	A29.3:11 <sup>a</sup>
Climate and health, monthly periodical .....	A29.8:
Same, circular announcing discontinuance of, June 22, 1896.....	A29.2:C61
Climate and man, with special regard to climate and climatic elements as curative or causative agencies of disease (Wilson). 1902. p. 104 .....	A29.3:31
Climate and rainfall, relations of, to prevalence of fungus diseases (Halsted). 1899. p. 126 .....	A10.3:65
Climate and thought (Easton). 1902. p. 111.....	A29.3:31
Climate and vegetation:	
Relation between (Linney). 1902. p. 98.....	A29.3:31
Request for data on (Abbe). 1894. p. 328 .....	A29.6:22
Climatic and agricultural features of arid regions of Pacific slope (Hilgard and others). 1882.....	A1.8:20
Climatic charts of U. S. 1900 .....	A29.2:C61
Climatic conditions, general:	
1893. p. 377 .....	A29.6:21
1894. p. 535 .....	A29.6:22
1895. p. 489 .....	A29.6:23
1896. p. 487 .....	A29.6:24
1897. p. 569 .....	A29.6:25
1898 (Henry). p. 595 .....	A29.6:26
1899 (Henry). p. 579 .....	A29.6:27
1900 (Henry). p. 587 .....	A29.6:28
1901 (Henry). p. 592 .....	A29.6:29
Climatic divisions of Missouri, note on (Abbe). 1900. p. 160.....	A29.6:28
Climatological atlas of Russian Empire, notes on (Abbe). 1900. p. 343.....	A29.6:28
Climatological congress. <i>See</i> Clermont-Ferrand, France.	
Climatological data, interchange of standard (McAdie). p. 135.....	A29.3:24
<i>See also</i> Canada — Ecuador — Hawaii — Jamaica — Mexico.	
Climatology:	
American grapevines (Lippincott). p. 194.....	A1.1:862
Antigua, W. I. (Alexander). 1901. p. 165 .....	A29.6:29

**Climatology—Continued**

Applied, notes on (Abbe). 1901. p. 458 .....	A29.6:29
Asia, southern and western (Dallas). 1896. p. 672.....	A29.3:11 <sup>2</sup>
California, note on (Abbe). 1900. pp. 165, 249 .....	A29.6:28
Costa Rica, monthly notes on, Jan., 1901–Oct., 1902 (Pittier) ....	A29.6:
Florida, with regard to crops (Mitchell). 1902. p. 208.....	A29.3:31
German Empire, development of (Meyer). 1896. p. 652.....	A29.3:11 <sup>2</sup>
Hann's handbook of, note on (Harrington). 1898. p. 353.....	A29.6:26
Havana, Cuba—	
monthly notes on, Apr.–July, Sept.–Oct., 1901 (Stockman)...	A29.6:29
same. Nov., 1901 (Hayes).....	A29.6:29
same. Dec., 1901; Feb.–Apr., 1902 (Stockman).....	A29.6:29, 30
report on (Del Monte). 1898. p. 152.....	A29.6:28
Medical, synopsis of course of lectures in, to senior class medical department University of Texas (Cline). 1902. p. 110 ..	A29.3:31
Monthly notes on, June, 1895–Sept., 1897 .....	A29.6:
Same. Oct.–Dec., 1897 (Henry).....	A29.6:25
Panama, Isthmus of, including temperature, winds, barometric pressure, and precipitation (Abbot). 1899. pp. 198, 302..	A29.6:27
Polar vs. equatorial (Abbe). 1898. p. 311.....	A29.6:26
Present condition and recent progress of (Koeppen). 1896. p. 461.	A29.6:23
Relation to cotton cultivation (Whitney). 1896. p. 143.....	A10.3:33
St. Kitts—	
notes on (Alexander). 1899. p. 583 .....	A29.6:27
same (Abbe). 1900. pp. 66, 330.....	A29.6:28
comparison of barometers, used in determining (Alexander). 1901. p. 257 .....	A29.6:29
San Diego, Cal., notes on, 1849–99 (Abbe). p. 20.....	A29.6:28
Use of word (Abbe). 1898. p. 214.....	A29.6:26
See also Climate.	
Climatology and horticulture:	
Relation of (Wickson). 1900. p. 45 .....	A10.3:76
Some interrelations of (Bailey). 1895. p. 431 .....	A29.3:11 <sup>2</sup>
Climatology circulars, sanitary.....	A29.15:
Climatology Division. See Weather Bureau, Agriculture Department.	
Climatology vs. meteorology (Whitney). 1898. p. 301.....	A29.6:26
Cline, Isaac M.:	
Brazos River Valley, Texas, floods in 1899, with notes on pre- vious overflows. p. 295.....	A29.6:27
same, 1900, with report of freshets in other streams. p. 198....	A29.6:28
Floods, Colorado Valley, Texas, April 7 to 17, 1900, special report on, and other floods during same period. p. 146.....	A29.6:28
Galveston weather forecast district, report on. 1902. p. 292....	A29.6:29
Medical climatology, synopsis of course of lectures in, to senior class medical department University of Texas. 1902. p. 110.	A29.3:31
New Orleans weather forecast district, report of, monthly, Sept., 1901–Oct., 1902 .....	A29.6:29, 30
Temperatures, probable, forecasts of. 1899. p. 166 .....	A29.3:24
Weather Bureau forecasts, value of. 1895. p. 293.....	A29.6:23
Cline, Joseph L. Porto Rico, island of, report on. 1901. p. 353...	A29.6:29
Clisiocampa Americana, relations of Pimpla conquisitor to (Weed and Fiske). 1900. p. 33.....	A9.6:26
Clock, postal telegraph, and weather bulletin, note on (Abbe). 1897. p. 351 .....	A29.6:25
Cloth. See also Maize-paper and maize-cloth.	
Clothes moths, true:	
Circular relative to (Marlatt). 1898 .....	A9.5:36
Report on (Riley). 1890. p. 211 .....	A9.7:2
Clothing and temperature, report on (Phillips). 1897. p. 200.....	A29.6:25
Clothing material, importation of. 1866. p. 425 .....	A27.9:4
Cloud, N. B. Cotton culture in 1866. p. 190.....	A1.1:866
Cloud observations:	
Blue Hill meteorological observatory, Milton, Mass. (Rotch). 1897. p. 12 .....	A29.6:25
same (Clayton). 1897. p. 135 .....	A29.6:25
Form for record of (Richards and Abbe). 1898. p. 456.....	A29.6:26
Improved nephoscope and (Marvin). 1896. p. 9 .....	A29.6:24



# Index

	Classification no.
Cloud observations—Continued	
International, notes on (Abbe). 1896. p. 461 .....	A29.6:24
Made in cooperation with scheme of International Cloud Com-	
mission, results of (Bigelow)—	
1898. p. 404 .....	A29.6:27
1899. p. 8 .....	A29.6:28
1900 .....	A29.1:899 <sup>2</sup>
Study of upper atmosphere by means of (Vettin). 1896. p. 758.	A29.3:11 <sup>3</sup>
Toronto (Blake). 1897. p. 19 .....	A29.6:25
Utilization of, in local and general weather predictions (McAdie).	
1894. p. 21 .....	A29.3:11 <sup>1</sup>
Cloud phenomena:	
Attending hailstorms (Very). 1894. p. 292 .....	A29.6:22
Sunrise and sunset, notes on (Abbe). 1898. p. 565 .....	A29.6:26
Cloud photography:	
Apparatus for (Henry). 1895. p. 169 .....	A29.6:23
same, correction. p. 255 .....	A29.6:23
Automatic, note on (Fassig). 1896. p. 456 .....	A29.6:24
Study of (Angot). 1896. p. 769 .....	A29.3:11 <sup>3</sup>
Cloudburst, tornado, or waterspout, note on (Abbe). 1897. p. 207.	A29.6:25
Cloudburst at Erwin, Tenn. (Worth). 1898. p. 244 .....	A29.6:28
Cloudbursts in New England, note on (Elmer). 1902. p. 478 .....	A29.6:30
Cloudiness:	
Monthly notes on, Jan., 1894—Oct., 1902 .....	A29.6:
Probable, during total solar eclipse of May 28, 1900 (Abbe). p. 422.	A29.6:27
Clouds:	
Altitudes of, note on (Abbe). 1897. p. 447 .....	A29.6:25
Balloons and kites, report on (Abbe). 1896. p. 206 .....	A29.6:24
Banks of distant (Abbe). 1897. p. 543 .....	A29.6:25
Cirrus on northwest side of a storm (Richards). 1897. p. 212 .....	A29.6:25
Cumulus—	
above columns of smoke, notes on (Abbe). 1901. p. 26 .....	A29.6:29
Bayonne, N. J., fire (Eadie) 1900. p. 433 .....	A29.6:28
formed by smoke (Mitchell). 1901. p. 498 .....	A29.6:29
over a fire, observation of (Ward). 1898. p. 104 .....	A29.6:26
same (Abbe). 1900. p. 549 .....	A29.6:28
Forms of—	
description of, charts .....	A29.2:C62
different, mean heights and velocities of (Clayton). 1892.	
p. 50 .....	A29.6:20
report on (Abbe). 1896. p. 369 .....	A29.6:24
Hail, notes on bombarding (Abbe). 1900. p. 542 .....	A29.6:28
Height of, a problem for students (Abbe). 1897. p. 161 .....	A29.6:25
Highest, observation of. 1894. p. 364 .....	A29.6:21
Incandescent, note on (Abbe). 1901. p. 466 .....	A29.6:29
Jamaica (Abbe). 1896. p. 15 .....	A29.6:24
Minnesota, movements of (Abbe). 1897. p. 252 .....	A29.6:25
Movements of, atmospheric circulation in tropical cyclones as	
shown by (Boyer). 1896 .....	A29.2:At6 <sup>1</sup>
Names of, international (Abbe). 1899. p. 61 .....	A29.6:27
Reflection by, of light from distant fire, note on (Abbe). 1901.	
p. 69 .....	A29.6:29
Roll of, horizontal (Abbe). 1895. p. 212 .....	A29.6:23
Stereoscope study of (Abbe). 1897. p. 98 .....	A29.6:25
Toronto, heights at (Abbe). 1897. p. 303 .....	A29.6:25
Umbrella, notes on (Johnson). 1898. p. 207 .....	A29.6:26
Upper, and weather changes, report on (Richards). 1898. p. 106.	A29.6:26
Wave or billow, report on (Henry). 1899. p. 57 .....	A29.6:27
Whirling alto-cumulus (Abbe). 1898. p. 68 .....	A29.6:26
Whirling alto-stratus (McAdie). 1897. p. 245 .....	A29.6:25
Winds and, report on (Brillouin). 1897. p. 437 .....	A29.6:25
Cloudy condensation, notes on (Abbe). 1897. p. 543 .....	A29.6:25
Cloudy days, records of (Abbe). 1897. p. 249 .....	A29.6:25
Clough, Homer W. Atmosphere, movement of, new method of	
observing direction of. 1898. p. 250 .....	A29.6:26
Clough, William:	
Sorghum, or Northern sugar cane. p. 54 .....	A1.1:864



Clough, William—Continued	
Sugar, production of, from sorghum or Northern sugar cane. p. 307.....	A1.1:865
Clover:	
Crops, condition of, June, 1864. No. 3. p. 10 .....	A27.9:2
Dodders infesting (Dewey). 1898 .....	A6.4:14
Seed of—	
American, chemical composition compared to that grown in Europe. 1898. p. 17.....	A1.9:79
crop of, 1863. No. 6. p. 11.....	A27.9:1
<i>See also</i> Alsike clover — Crimson clover — Crops, principal — Red clover seed.	
Clover hay worm, <i>Asopia costalis</i> , some studies of (Webster). 1891. p. 121.....	A9.7:4
Clover-leaf beetle, invasion by (Smith). 1891. p. 231.....	A9.7:3
Clover mite:	
Circular relative to (Marlatt). 1897 .....	A9.5:19
Report on (Riley and Marlatt). 1890. p. 45 .....	A9.7:3
Clover-seed caterpillar, report on (Osborn and Gossard). 1891. p. 56.	A9.7:4
Clover-seed midge in Wisconsin, note on. 1886. p. 39 .....	A9.3:12
Clover worm. <i>See</i> Green clover worm.	
Club-root in U. S., report on (Eycleshymer). 1891. p. 79.....	A28.5:7
Clubb, Henry S. Michigan fruit region, facts relating to. 1870. p. 37.	A27.9:8
Clubs. <i>See</i> Agricultural and horticultural societies and clubs.	
Cluss, Adolph. <i>See</i> , for report as architect, 1868, Agriculture de- partment, architect of.	
Class and Kammerhueber, Agriculture Department, building for, specifications of workmanship and materials required in. 1867 ..	A1.2:Sp3
Clute, Jacob. Address of, before National Road Conference, July, 1894. p. 14 .....	A22.3:10
Coal, anthracite, production of, in Pennsylvania. 1820-72. p. 36 .	A27.9:11
<i>See also</i> Brown coal.	
Coal ashes. <i>See</i> Ashes.	
Coal oil:	
Composition and qualities, manufacture, use in arts, history of discovery, and theory of origin (Lesley). p. 429 .....	A1.1:862
West Virginia (Shattuck). p. 525 .....	A1.1:863
<i>See also</i> Petroleum.	
Coates, C. E., jr. Agricultural course in the South, principles under- lying formation of. 1900. p. 59 .....	A10.3:76
Cobb County, Georgia, soil survey of (Burke and Marean). p. 317..	A26.5:901 <sup>1</sup>
Coccidæ:	
Collected in Puerto Rico by A. Busck in 1899, list of (Pergande and Cockerell). 1900. p. 92 .....	A9.6:22
Distribution of (Cockerell). 1893. p. 99.....	A9.7:6
Georgia, notes on (Scott). 1900. p. 49 .....	A9.6:26
Jamaican, some food plants of (Cockerell). pp. 158, 245 .....	A9.7:5
Japanese, some new species of, with notes (Cockerell). 1896. p. 47 .....	A9.8:4
Maritime species of (Cockerell). 1894. p. 42 .....	A9.7:7
Massachusetts, notes on some (Cooley). 1898. p. 61.....	A9.6:17
Natural condition which affects distribution and abundance of (Cockerell). 1895. p. 91 .....	A9.6:2
New, collected in Mexico by Prof. C. H. T. Townsend, notes and descriptions of (Cockerell). 1896. p. 31 .....	A9.8:4
Ohio, partial list of (Webster and Burgess). 1902. p. 109.....	A9.6:37
Parasites of, in collection of Agriculture Department (Howard). p. 350 .....	A1.1:880
San Francisco, some found by Alex. Craw in course of his quar- antine work at (Cockerell). 1896. p. 42 .....	A9.8:4
<i>See also</i> Parasites.	
Coccidia:	
Hepatic, of rabbits, <i>Eimeria stiedæ</i> , correct name for. 1902. p. 18.	A4.3:35
New genus of, <i>Eimeriella</i> (Stiles). 1902. p. 18.....	A4.3:35
Coccids:	
Fatal temperature for some, in Georgia (Scott). 1899. p. 82 ....	A9.6:20
New, on birch (Hubbard and Pergande). 1898. p. 13.....	A9.6:18

# Index

	Classification no.
Coccinellid, abnormal, report on (Burgess). 1898. p. 59 .....	A9.6:17
See also Australian scymnus.	
Coccinellidæ:	
Conservatory, experiment with (Webster). 1890. p. 363 .....	A9.7:2
Scale-feeding predatory insects which affect usefulness of (Marlatt). 1902. p. 84 .....	A9.6:37
See also Tasmanian coccinellidæ.	
Cockerell, Theodore Dru Alison:	
Coccidæ—	
distribution of. 1893. p. 99 .....	A9.7:6
natural conditions which affect distribution and abundance of. 1895. p. 91 .....	A9.6:2
new, collected in Mexico, by Prof. C. H. Tyler Townsend, notes and descriptions of. 1896. p. 31 .....	A9.8:4
some, found by Alex. Craw in course of his quarantine work at San Francisco. 1896. p. 42 .....	A9.8:4
Entomological ethics, report on. 1898. p. 87 .....	A9.6:17
Fungi of Custer County, Colo. 1889. p. 84 .....	A28.5:5
Jamaican coccidæ, some, food plants of. 1893. p. 158, 245 .....	A9.7:5
Japanese coccidæ, some new species of, with notes. 1896. p. 47 .....	A9.8:4
Lecanium infesting blackberry, considered identical with L. fitchii. 1894. p. 29 .....	A9.7:7
Maritime species of coccidæ. 1894. p. 42 .....	A9.7:7
New Mexico, injurious insects of, notes from. 1894. p. 207 .....	A9.7:7
New Mexico and Arizona, entomological notes from. 1902. p. 107 .....	A9.6:37
Orthezia insignis as garden pest. 1892. p. 89 .....	A9.7:5
Paris green, experience with. 1897. p. 25 .....	A9.6:9
Plant faunæ, notes on. 1892. p. 117 .....	A9.7:5
San Jose scale and its nearest allies. 1897 .....	A9.8:6
Sawfly, new, which is injurious to hollyhocks. 1894. p. 251 .....	A9.7:7
Slip-records for entomologists, note on. 1893. p. 198 .....	A9.7:6
West Indian rufous scale, report of. 1892. p. 380 .....	A9.7:4
See also, as joint author, Pergande, Theodore.	
Cocklebur, a weed poisonous to stock. p. 99 .....	A4.1:893-4
Cockrill, B. F. Live-stock interests in Tennessee. 1883. p. 225 .....	A1.7:2
Cockroaches:	
Migration of (Howard). 1895. p. 349 .....	A9.7:7
Report on—	
1890 (Riley). p. 266 .....	A9.7:2
1896 (Marlatt). p. 84 .....	A9.6:4
1902 (Marlatt) .....	A9.5:51
Viviparous, report on. 1891. p. 443 .....	A9.7:3
Cocoa palm, origin and distribution of (Cook). 1901. p. 257 .....	A6.5:7
Cocoa preparations, adulteration of (Spencer). 1892. p. 875 .....	A7.3:13 <sup>r</sup>
Same (Ewell). 1892. p. 933 .....	A7.3:13 <sup>r</sup>
Cocoanut mealy-wing, report of. 1893. p. 314 .....	A9.7:5
Cocoanut palms, diseased, in Cuba, report of investigation of (Busck). 1902. p. 20 .....	A9.6:38
Cocos Island, plants from, collected by U. S. S. "Albatross" in 1887-91, list of (Rose). 1892. p. 135 .....	A6.5:1
Code, W. H.:	
Arizona, irrigation in, use of water in. 1899. p. 111 .....	A10.3:86
Irrigation in Salt River Valley, Arizona. 1900. p. 83 .....	A10.3:104
same. 1901. p. 51 .....	A10.3:119
Codling moth:	
Double-brooded, report of (Marlatt). 1894. p. 248 .....	A9.7:7
Investigation of, in Idaho, 1900 (Simpson). p. 51 .....	A9.6:30
Investigations in Northwest during 1901 (Simpson). 1902 .....	A9.6:35
Life history, studies on (Gillette). 1902. p. 5 .....	A9.6:31
Recent studies on. 1899. p. 19 .....	A1.9:92
Report on (Howard). p. 88 .....	A1.1:887
Coe, A. B.:	
Chinook winds, how they came in 1896. p. 413 .....	A29.6:24
Kites in Montana. 1896. p. 237 .....	A29.6:24
Cœur d'Alene Mountains, Idaho, botanical survey of, during summer of 1895 (Leiberg). 1897. p. 5 .....	A6.5:5

		<b>Index</b>
		<b>Classification no.</b>
<b>Coffee:</b>		
Adulteration of (Spencer). 1892. p. 875 .....		A7.3:13 <sup>1</sup>
Brazilian. 1876. p. 275 .....		A27.9:14
Consumption of, in U. S., per capita of population—		
1870-1895. p. 552 .....		A1.10:895
1896. p. 595 .....		A1.10:896
1898. p. 723 .....		A1.10:898
Cultivation of, in Mexico (Foster). 1876. p. 268 .....		A27.9:14
Culture and habits of (Weaver). p. 31 .....		A1.1:879
Culture in Guatemala. 1889. p. 175 .....		A27.9:27
Imports and consumption of, in U. S. 1872. p. 35 .....		A27.9:11
Plant, cultivation of. p. 25 .....		A1.6:3
Shade in culture of (Cook). 1901 .....		A6.3:25
Substitutes (Langworthy). 1900. p. 22 .....		A1.9:122
Coffey, George N. See, as joint author, Dorsey, Clarence Wilbur.		
Coffey, George N., and Hearn, W. Edward:		
Soil survey of—		
Alamance County, North Carolina. p. 297 .....		A26.5:901 <sup>1</sup>
Cary area, North Carolina. p. 311 .....		A26.5:901 <sup>1</sup>
Coffin, Fred. F. B.:		
Artesian and underflow conditions in South Dakota. 1893. pt.		
4, p. 51 .....		A15.2:Ir7 <sup>2</sup>
Artesian well investigation, field work in South Dakota. 1890.		
p. 125 .....		A15.2:Ar7
Cogniaux, Alfred. Roseanthus, a new genus of cucurbitaceae from		
Acapulco, Mexico. 1896. p. 577 .....		A6.5:3
Cohn, Ferd. Hessian fly in Silesia in 1869; translated by C. F.		
Gissler. 1883. App. p. 39 .....		A8.1:3
Coins and currency of U. S. 1898. p. 676 .....		A1.10:898
Colaspis flavida injuring Le Conte pear, note on. 1886. p. 40 .....		A9.3:12
Cold, widespread area of, notes on (Abbe). 1899. p. 257 .....		A29.6:27
Cold frames. See Greenhouses and cold frames.		
"Cold Friday," Feb. 7, 1807, note on (Henry). p. 545 .....		A29.6:27
Cold spell of Nov., 1896, in Montana and adjoining States (Hazen).		
p. 414 .....		A29.6:24
Cold storage:		
Mechanical, for fruit (Clark). 1900. p. 12 .....		A1.9:119
On the farm (Clark). 1900. p. 9 .....		A1.9:119
Cold-wave bulletins .....		A29.9:
Cold waves:		
Atmospheric, depth of (Abbe). 1899. p. 62 .....		A29.6:27
Florida. 1886. p. 23 .....		A27.9:24
January and February, 1864, notes on (Abbe). p. 114 .....		A29.6:28
Middle Gulf coast (Garriott). 1895. p. 334 .....		A29.6:23
Origin of (Abbe). 1894. p. 511 .....		A29.6:22
Possibility of giving warnings of, to stock-raising interests 48		
hours in advance (Brandenburg). 1899. p. 33 .....		A29.3:24
same (Glass). 1899. p. 35 .....		A29.3:24
Southwest (Hazen). 1899. p. 291 .....		A29.6:27
Warnings of, for benefit of transportation companies (Smith).		
1899. p. 37 .....		A29.3:24
Year 1898. Report on (Garriott). p. 208 .....		A1.1:898
same. p. 27 .....		A29.1:898
Cole, Frank N. Barometric pressure, diurnal variations of. 1892 ..		A29.3:6
Coleman, Clarence. What our bad roads cost us. 1895. p. 17 .....		A22.3:11
<b>Coleoptera:</b>		
California, notes on habits of some (Coquillett). 1892. p. 260 ..		A9.7:4
Certain species of, that attack useful plants, notes on (Chittenden).		
1897. p. 20 .....		A9.6:9
Habits of some species of, observed in San Diego County, Calif.		
(Blaisdell). 1892. p. 33 .....		A9.7:5
Hymenopterous parasites of, observations on some (Chittenden).		
1893. p. 247 .....		A9.7:5
See also Beetles.		
Coleopterous enemies of grapevine, some (Chittenden). 1895. p. 384 ..		A9.7:7
Colima, Mexico, plants, collection of, made in, by Edward Palmer,		
in the years 1890 and 1891 (Rose). 1895. p. 293 .....		A6.5:1

# Index

	Classification no.
College faculty meetings (Scott). 1895. p. 80 .....	A10.3:24
College Station, Md., sorghum-sugar experiments at (Wiley). 1889.	A7.3:26
College work section, Association of American Agricultural Colleges and Experiment Stations, report of:	
1890. p. 139 .....	A10.5:3
1891. p. 105 .....	A10.3:7
1892. p. 24 .....	A10.3:16
1893. pp. 25, 92 .....	A10.3:20
1894. p. 79 .....	A10.3:24
1895. pp. 32, 98 .....	A10.3:30
1896. pp. 16, 69 .....	A10.3:41
1897. p. 55 .....	A10.3:49
1898. p. 87 .....	A10.3:65
1899. p. 65 .....	A10.3:76
1900. p. 99 .....	A10.3:99
1901. p. 67 .....	A10.3:115
Colleges:	
Meteorology in, to what extent is it taught at present; should it be offered as an undergraduate or as a postgraduate course? (Loveland). 1902. p. 90 .....	A29.3:31
<i>See also</i> Agricultural colleges — Universities.	
Colleges and universities:	
State, relation of churches to (Harris). 1899. p. 100 .....	A10.3:65
Weather Bureau and, notes on (Abbe). 1898. p. 568 .....	A29.6:26
<i>See also</i> Agricultural colleges — Cornell University — Harvard University — Johns Hopkins University — Kansas University — Lake Erie College — Maine State College — Minnesota — Uni- versities.	
Collier, Peter:	
Analytical work done on sorghum and cornstalks by chemical division, July–December, 1880 .....	A1.6:33
Sorghum as a sugar-producing plant, investigation of. 1883 .....	A1.8:27
<i>See also</i> , as joint author, Vasey, George.	
<i>See also</i> for reports as chemist, Chemistry Bureau, Agriculture Department, 1878–1882 .....	A7.1:
Collingwood, H. W. Farmers' institute work, best method of pub- lishing results of. 1902. p. 39 .....	A10.3:110
Collins, G. N. Seeds of commercial saltbushes. 1901 .....	A6.3:27
Collins, Jerome J. Marsh lands, reclamation of, extracts from report on. p. 600 .....	A1.1:870
Collins, P. V. Address of, before national road conference, July, 1894. p. 35 .....	A22.3:10
Collins, V. D. Morocco, agriculture of. p. 499 .....	A1.1:862
Colman, Norman J.:	
Address of—	
before Association of Official Agricultural Chemists. 1885. p. 21 .....	A7.3:7
before convention of Association of Agricultural Colleges and Experiment Stations, Washington, D. C., July 8, 1885 .....	A1.8:37
before convention of agriculturists. 1885. p. 5 .....	A1.7:9
before National Cattle Growers' Convention, Kansas City, Mo. 1887 .....	A1.8:43
Agricultural experiment stations in U. S., organization of, intro- duction to report on. 1889. p. 5 .....	A10.3:1
Animals, domestic, contagious, infectious, and communicable dis- eases among, rules of Department of Agriculture for suppres- sion of. 1887 .....	A1.8:44
Beef supply, American, address on, before 3d National Conven- tion of Stockmen, Chicago, Nov., 1885 .....	A1.8:38
Business methods in Agriculture Department. 1888 .....	A1.2:C71
Chestnut oak for railroad ties, circular on. 1887 .....	A13.4:4
Downy mildew and black rot of grape, circular on treatment of. 1887 .....	A28.4:3
Dressed-meat traffic of U. S., answers to questions regarding. p. 277 .....	A4.1:886
Timber, increasing durability of. 1887 .....	A13.4:3
<i>See also</i> , for reports as Commissioner of Agriculture, 1885–1888 ...	A1.1:

# Index

## Classification no.

Cologne, Germany, American dried apples in (Wamer). 1895. p. 14.	A7.3:48
Colombia, statistics of. 1890. p. 569.....	A27.9:28
See also Colon.	
Colon, Colombia, rainfall at, note on (Abbe.) 1893-95. p. 362.....	A29.6:26
Colonization:	
Essay on. p. 569.....	A1.1:870
Vineland as a lesson in. p. 410.....	A1.1:869
Color, relation of temperature to, note on (Abbe). 1900. p. 18....	A29.6:28
Colorado:	
Agricultural progress of. 1869. p. 226 .....	A27.9:7
Agricultural statistics of. 1869. p. 296*.....	A27.9:7
Agriculture of, notes on—	
1866. p. 442 .....	A27.9:4
1869 (Thomas). p. 379*.....	A27.9:7
Arid regions of, possibilities of reclamation of, by utilizing under- lying waters (Miller). 1891. pt. 1, p. 301 .....	A15.2:Ir7
Artesian well investigation, field work (Carpenter). 1890. p. 173.	A15.2:Ar7
Cattle and sheep industry of (Kennedy). p. 367.....	A4.1:891-2
Cattle industry of (McNeely). p. 377.....	A4.1:898
Climate of, and its effect on trees (Parsons). 1888. p. 221.....	A13.3:2
Crop year in. 1890. p. 520.....	A27.9:28
Eastern, artesian basins of, geological conditions of (Van Diest). 1890. p. 87 .....	A15.2:Ar7
Entomological notes from, report on (Gillette). 1900. p. 76....	A9.6:26
Evotomys from, description of new (Merriam). 1890. p. 23 ...	A5.5:4
Forest conditions of Rocky Mountains in (Ensign). p. 41.....	A13.3:2
Grasses and forage plants of, notes on (Pammel). 1897.....	A3.3:9
Grasses of arid districts of, investigation of (Vasey). 1886.....	A6.3:1
Grasshopper disease in (Gillette). 1896. p. 89.....	A9.6:6
Insect notes—	
1901 (Gillette). p. 51.....	A9.6:31
1902 (Caudell). p. 35 .....	A9.6:38
Insects, few, that have been unusually abundant in, this year (Gillette). 1897. p. 77.....	A9.6:9
Irrigation in, practical. p. 254.....	A1.1:871
Irrigation statistics and progress (Carpenter). 1890. p. 181.....	A15.2:P94 <sup>1</sup>
Lamb feeding in (Clark). p. 275 .....	A4.1:901
Live-stock industry of (Standart). p. 326 .....	A4.1:885
same (McNeely). p. 425.....	A4.1:889-90
Northern, agriculture of, notes on (Thomas). 1869. p. 284*....	A27.9:7
Plants from, descriptions of new (Holzinger). 1893. p. 286....	A6.5:1
Rain in, seasonal, note on (Abbe). 1900. p. 155.....	A29.6:28
River discharges in (Abbe). 1899. p. 314.....	A29.6:27
Rocky Mountain locust in, in 1880 (Chipman). App. p. 55.....	A8.1:3
Seasonal forecasts in, 1872-1899, notes on (Abbe). p. 206.....	A29.6:28
Sheep industry of, in 1897 (McNeely). p. 377.....	A4.1:898
Snowfall in (Abbe). 1897. p. 210.....	A29.6:25
Water laws of (Field). 1899. p. 39.....	A10.3:58
Water supply of, for season of 1900, as depending on snowfall (Brandenburg). p. 493.....	A29.6:28
See also Amity Canal — Arkansas Valley — Cache la Poudre Val- ley — Colorado Springs — Custer County — Denver — Fort Col- lins — Fort Lyon — Grand Valley — Jefferson County.	
Colorado grasshopper. See Grasshopper, hateful.	
Colorado potato beetle:	
In Georgia, note on. 1886. p. 32 .....	A9.3:12
Notes on—	
1871. p. 332 .....	A27.9:9
1874 (Glover). p. 324 .....	A27.9:12
Two methods of destroying (Glover). 1875. p. 445.....	A27.9:13
See also Grosbeak, rose-breasted.	
Colorado Springs, Colo., meteorological records at, brief discussion of hourly, from November, 1892, to September, 1894 (Morrill). 1896. p. 215 .....	A29.1:896
Colorado Valley, Texas, floods in, special report on, April 7 to 17, 1900, and other floods during same period (Cline). p. 146 ...	A29.6:28

\* By a misprint, this page number appears twice.



# Index

	Classification no.
Coloring matter for foods, analysis of, provisional method for (Tolman). 1902. p. 111 .....	A7.3:65
Columbia River:	
Flood in, 1894 (Abbe). p. 510 .....	A29.6:22
Possibility of high water in, from melting snow in mountains (Pague). 1899. p. 252.....	A29.6:27
Columbia River Region, <i>Leibergia</i> , a new genus of umbelliferæ from (Coulter and Rose). 1896. p. 575 .....	A6.5:3
Columbus, Christopher. Discovery of magnetic declination made by (Bartelli). 1895. p. 486.....	A29.3:11 <sup>1</sup>
Columbus, Ohio, agriculture school, speech of James Wilson at close of, July 7, 1902 .....	A1.2:W69
Colvin, Richard. Italian honeybee; or, Culture and Italianization of native or black honeybee. p. 530 .....	A1.1:863
Comb building, foundation in. 1901. p. 23.....	A1.9:133
Combustion, spontaneous, meteorological conditions favorable to, note on (Abbe). 1900. p. 249 .....	A29.6:28
Comes, O., and Deperais, —. Grape-vine, <i>Peronospora</i> of, first results obtained from use of chloride of aluminum and proposal of new remedies against. 1890. p. 94 .....	A6.3:11
Commelinaceæ, new genus of, <i>Treleasea</i> (Rose). 1899. p. 207.....	A6.5:5
Commerce:	
Between United States and Mexico, for 1873, 1878, 1883, 1888, and 1893. p. 492 .....	A27.9:32
Highways of (Haupt). 1901. p. 56 .....	A22.3:21
Injurious insects and report on (Howard). 1895. p. 332 .....	A9.7:7
International, agricultural contributions to. 1891. p. 77.....	A27.9:29
Work of meteorologist for benefit of (Bigelow). 1899. p. 71....	A1.10:899
Commercial bodies, relations of weather officials with, how promoted (Beals). 1899. p. 69 .....	A29.3:24
Same (Sims). 1899. p. 74.....	A29.3:24
Commercial butter cultures used in connection with pasteurized cream (Allen). 1898. p. 21 .....	A1.9:103
Commercial fertilizers. <i>See</i> Fertilizers, chemical analysis, methods of.	
Commercial plantations, hardy catalpa in (Hall). 1902 .....	A13.3:37
Commercial saltbushes, seeds of (Collins). 1901 .....	A6.3:27
Common schools. <i>See</i> Schools.	
Como, Italy, International Electrical Congress at, 1899, notes on (Abbe). p. 419.....	A29.6:27
Comstock, J. Henry:	
Cotton insects, report upon. 1879.....	A9.2:C82
Insects, miscellaneous, report on. p. 195 .....	A1.1:881-2
same. p. 195.....	A9.1:882
Sugar cane, insects injurious to. 1881.....	A1.6:35
<i>See also</i> , for reports as Entomologist, Agriculture Department, 1880 and 1881 .....	A9.1
Comstock's rotary spader, description of, 1865. No. 5. p. 34 .....	A27.9:3
Concentrated fertilizers. <i>See</i> Fertilizers.	
Conchyliastes musicus. <i>See</i> Mosquito.	
Condensation, cloudy, notes on (Abbe). 1897. p. 543 .....	A29.6:25
Condensation of atmospheric moisture, report on (Barus). p. 526 ..	A29.1:891 <sup>1</sup>
Condensed milk. <i>See</i> Milk.	
Condimental and medicinal cattle and poultry foods. 1901. p. 22..	A1.9:144
Condimental feeding stuffs, use of, in feeding animals. 1898. p. 25.	A1.9:73
Condiments. <i>See</i> Spices and condiments.	
Conduct and the weather, report on (Dexter). 1899. p. 353.....	A29.6:27
Condurango, specimens of, note on. 1871. p. 403.....	A27.9:9
Cone-nose, report on (Marlatt). 1896. p. 32 .....	A9.6:4
Conestoga horse, brief history of (Strohm). p. 175 .....	A1.1:863
Confections, adulteration of (Wiley and others). 1892. p. 633.....	A7.3:13 <sup>6</sup>
Conformation of beef and dairy cattle (Soule). 1902.....	A1.9:143
Conger, Norman B.:	
Great Lakes, wrecks and casualties on, during 1895, 1896, and 1897.	A29.2:G81 <sup>6</sup>
Thunderstorms, forecasting of, during summer of 1893.....	A29.3:9
Tornadoes of May 25, 1896, in Michigan, report on. p. 156 .....	A29.6:24
Water temperatures of Great Lakes. 1899. p. 352 .....	A29.6:27



	<b>Index</b>
	<b>Classification no.</b>
Conger, Norman B.—Continued	
Weather forecasts best calculated to aid maritime interests of Great Lakes; method of reaching those interested. 1899. p. 20.	A29.3:24
Weather forecasts in street cars. 1902. p. 206	A29.3:31
Congress, members of, circular letter to, requesting cooperation with Office of Road Inquiry, Agriculture Department	A22.4:3
Congressional aid in road improvement, necessity of (Stone). 1902. p. 23	A22.3:25
Congressional reprints of agricultural publications for sale by Superintendent of Documents. 1897	A21.2:R29
Conifers, New England, some diseases of (Schrenk). 1900	A28.3:25
Coniomycetes fungi. <i>See</i> Fungi.	
Conn, Herbert William:	
Dairy bacteriology. 1895	A10.3:25
Milk, fermentations of. 1892	A10.3:9
Connecticut:	
Commercial fertilizers in, law on. 1870. p. 151	A27.9:8
Farm resources and products of. 1868. p. 9	A27.9:6
Irrigation in, notes (Phelps and Voorhees). 1897	A10.3:36
Nursery inspection in (Britton). 1899. p. 131	A10.3:65
Road improvement in, extract from governor's message (Lounsbury). p. 2	A22.4:33
San Jose scale in (Britton). 1898. p. 81	A9.6:17
Snows in, early, from 1783 to 1882 (Abbe). p. 418	A29.6:22
<i>See also</i> Hartford — New Haven — Thompson.	
Connecticut Experiment Station:	
Address on (Atwater). 1901. p. 51	A10.3:99
Fungi described in recent reports of (Thaxter). 1891. p. 278	A28.5:7
Connecticut River, tobacco production on. 1865. No. 2. p. 18	A27.9:3
Connecticut tobacco:	
Bulk fermentation of (Floyd). n. d.	A26.4:5
Physiological studies of (Loew). 1900	A1.8:65
Production of, on Connecticut River. 1865. No. 2. p. 18	A27.9:3
Shade-grown, to be sold at auction May 1, 1902, at Hartford, Conn., catalogue of. 1902	A26.2:T55
<i>See also</i> Tobacco.	
Connecticut Valley:	
Soil map of, description of. 1900	A26.4:7
Soil survey in (Dorsey and Bonsteel). 1900. p. 125	A1.8:64
Sumatra tobacco, growing under shade in (Whitney). 1902	A26.3:20
Connick, H. D. H. Yuba River, use of water of. 1901. p. 130	A10.3:100
Connor, Patrick:	
Evening, character of the. 1898. p. 306	A29.6:26
Ferrel, William, short biography of. 1898. p. 457	A29.6:26
Meteorology for use of schools, primary work on. 1899. p. 102	A29.3:24
Weather forecasts, long-range; can they be made with sufficient precision to be of general utility? 1899. p. 44	A29.3:24
Conservatory, coccinellidæ in, experiment with (Webster). 1890. p. 363	A9.7:2
Constable, Howard. Wood preservation. 1887. p. 92	A13.3:1
Same, reprint. 1894. p. 276	A13.3:9
Constants, phenologic or thermal (Ihne). 1895. p. 427	A29.3:11 <sup>1</sup>
Consular correspondence of Agriculture Department (Dodge). p. 487	A1.1:864
Consuls and consular agents, reports of, on cotton crop and its enemies in Mexico, Central and South America, and West Indies. 1885. app. p. 59	A8.1:4
Contagious diseases. <i>See</i> Diseases of animals and references thereunder.	
Contributions from U. S. National Herbarium	A6.5:
Converse, F. A. Address of welcome, American Association of Farmers' Institute Workers, held at Buffalo, N. Y., Sept. 18 and 19, 1901. 1902. p. 11	A10.3:110
Convict labor:	
Highways, use on (Stone). 1895. p. 11	A22.3:16
Plan for use of, on roads. 1895. p. 7	A22.3:16
Public roads, use on (Graham). 1895. p. 34	A22.3:11

# Index

	Classification no.
Convict labor—Continued	
Road building, use in (Lyon). 1901. p. 90.....	A22.3:21
Road improvement in North Carolina, use in (Holmes). 1895. p. 5.....	A22.3:16
Southern States, road building with (Holmes). 1901. p. 319 ...	A1.10:901
Conway Springs, Kans., sorghum sugar experiments at:	
1888 (Deming). p. 280 .....	A1.1:888
same, p. 63 .....	A7.3:20
1888 (De Schweinitz). p. 284 .....	A1.1:888
same, rearranged. p. 74 .....	A7.3:20
1888 (Wiley). p. 12 .....	A7.3:20
1889 (Wiley). pp. 12, 23 .....	A7.3:26
1889 (De Schweinitz). p. 65 .....	A7.3:26
Cook, A. J.:	
Agricultural experiments in 1891, report of. p. 83 .....	A9.3:26
Entomologists, work of, in experiment stations. 1891. p. 212 ..	A9.7:3
Entomology, teaching, report on. 1890. p. 107.....	A9.7:3
Kerosene emulsion and arsenites, some historic notes on. 1891. p. 62.....	A9.7:4
Poplar gonioctena, report on. 1891. p. 67 .....	A9.7:4
Cook, George H. Agricultural education in New Jersey. 1882. p. 7.	A1.8:22
<i>See also</i> , as joint author, Atwater, Wilbur Olin.	
Cook, Orator Fuller:	
Agriculture in tropical islands of United States. 1901. p. 349...	A1.10:901
Animal industry of Porto Rico, notes on. p. 663 .....	A4.1:899
Chayote, a tropical vegetable. 1901 .....	A6.3:28
Cocoa palm, origin and distribution of. 1901. p. 257.....	A6.5:7
Rubber cultivation for Porto Rico. 1900 .....	A6.4:28
Seed and plant introduction section, Agriculture Department, circular relative to. 1899 .....	A6.4:16
Shade in coffee culture. 1901 .....	A6.3:25
Cook, S. R. Atmosphere, planetary, permanency of, according to kinetic theory of gases. 1902. p. 401 .....	A29.6:30
Cook County, Ill., tornado of May 25, 1896, in (Abbe). p. 168.....	A29.6:24
Cook Inlet region, Alaska, natural history of (Osgood). 1901. p. 51.	A5.5:21
Cooke, Wells W.:	
Agriculture, methods of instruction in teaching. 1896. p. 39 ...	A10.3:30
Bird migration in Mississippi Valley; edited and revised by Clin- ton Hart Merriam. 1888.....	A5.3:2
Milk, sour, analysis of. 1890. p. 22.....	A7.3:31
Cooking:	
Diminished pressure on, effects of (Abbe). 1900. p. 160 .....	A29.6:28
Instruction in, in public schools of New York City, history and present status of (Hogan). 1899.....	A10.3:56
Cooley, George W.:	
Gravel roads in Hennepin County, Minn., method of construction and cost of. 1901. p. 96 .....	A22.3:21
Hydrology of Lake Minnetonka watershed. 1899. p. 14 .....	A29.6:27
Cooley, Robert Allen. Massachusetts coccidæ, notes on some. 1898. p. 61.....	A9.6:17
Coolidge, J. H. Farmers' institute work accomplished in Illinois. 1902. p. 20 .....	A10.3:120
Coombs, F. E. Calumet Plantation Sugar Experiment Station, Pat- terson, La., experiments at. 1892. p. 48 .....	A7.3:37
Cooper, Ellwood. Olive industry. 1892. p. 130.....	A1.8:20
<i>See also</i> as collector, Coquillett, Daniel William.	
Coordinate axes, standard system of, for magnetic and meteorolog- ical observations and computations (Bigelow). 1897. p. 201.	A29.6:25
Copper-gypsum as remedy for grape mildew (Nessler). 1891. p. 73.	A28.5:6
Copper in wines (Fallot). 1890. p. 96 .....	A6.3:11
Copper, metallic. <i>See</i> Sugar.	
Copper River country, Alaska, notes on (Abercrombie). p. 307....	A10.1 <sup>2</sup> :901
Copper salts as fungicides (Chester). 1891. p. 21.....	A28.5:6
Copper-soda as remedy for grape mildew (Nessler). 1891. p. 73...	A28.5:6
Copper sulphate and germination; treatment of seed with copper sulphate to prevent attacks of fungi (Evans). 1896.....	A28.3:10
<i>See also</i> Grape mildew.	

<b>Coquillett, Daniel William:</b>	
Australian insects sent by Albert Koebele to Ellwood Cooper and B. M. Lelong, report on. 1893. p. 251.....	A9.7:5
same, status of. 1893. p. 24.....	A9.7:6
Australian ladybird, imported. 1889. p. 70.....	A9.7:2
Buffalo gnats, or black flies, of United States. 1898. p. 66.....	A9.6:10
Buhach, production and manufacture of. 1886. p. 7.....	A9.3:12
Cankerworms, circular on. 1895.....	A9.5:9
Cecidomyians, two new, destructive to buds of roses. 1900. p. 44.....	A9.6:22
Cecidomyiid injurious to seeds of sorghum. 1898. p. 81.....	A9.6:18
Cecidomyiid that lives on poison oak. 1895. p. 348.....	A9.7:7
Coleoptera of California, notes on habits of some. 1892. p. 260.....	A9.7:4
Corn worm or boll worm in California. 1889. p. 331.....	A9.7:1
Cottony cushion-scale, remedies for. p. 552.....	A1.1:886
Cypress twig borer, report on. 1890. p. 116.....	A9.7:3
Cyrtoneura caesia, is [it] an injurious insect? 1895. p. 338.....	A9.7:7
Dipterous insects, two, injurious to cultivated flowers. 1895. p. 399.....	A9.7:7
Dipterous leaf-miners, two, on garden vegetables. 1895. p. 381.....	A9.7:7
Dipterous parasite of Diabrotica soror. 1890. p. 233.....	A9.7:2
Dipterous parasite of melanoplus devastator in California. 1892. p. 22.....	A9.7:5
<b>Hydrocyanic acid gas—</b>	
as an insecticide. 1893. p. 176.....	A9.7:6
patent on process declared invalid. 1894. p. 257.....	A9.7:7
treatment with, for scale insects, history of. 1891. p. 457.....	A9.7:3
use of, for destruction of red scale. 1890. p. 202.....	A9.7:2
<b>Insects, beneficial and injurious, of California in</b>	
1892. p. 9.....	A9.3:30
1893. p. 22.....	A9.3:32
Locust invasion of California in 1891, report on. p. 34.....	A9.3:27
Locusts of San Joaquin Valley, California. p. 289.....	A1.1:885
Lysiphlebus, Braconid genus, variations in. 1891. p. 313.....	A9.7:3
Mosquitoes, North American, synoptic tables of. 1900. p. 4.....	A9.5:40
Oscinidae and Agromyzidae, reared at United States Department of Agriculture, habits of. 1898. p. 70.....	A9.6:10
Red scale of California, various methods for destroying. 1890. p. 9.....	A9.3:22
Rove beetle, another parasitic. 1891. p. 318.....	A9.7:3
San José scale in Virginia. 1894. pp. 253, 324.....	A9.7:6
<b>Scale insects—</b>	
California, report for 1891. p. 13.....	A9.3:26
gas treatment for. p. 123.....	A1.1:887
same, supplementary report. 1888. p. 41.....	A9.7:1
new, from California. 1891. p. 382.....	A9.7:3
various methods for destroying, annual report on. 1890. p. 19.....	A9.3:23
various methods for destroying, report on. p. 123.....	A1.1:888
same, p. 123.....	A9.1:888
Tachinidae of America, north of Mexico, a family of parasitic two-winged insects, revision of. 1897.....	A9.8:7
Violet pest, new, report on. 1900. p. 48.....	A9.6:22
Walnut spanworm, report on. 1897. p. 64.....	A9.6:7
Wheat-pest, new, report of. 1895. p. 406.....	A9.7:7
Yucca whipplei, pollination of, in California. 1893. p. 311.....	A9.7:5
<b>Corbett, Lee Cleveland:</b>	
Home fruit garden, preparation and care. 1901. p. 431.....	A1.10:901
same.....	A1.9:154
Horticulture, experimental, systems of record keeping in. 1896. p. 104.....	A10.3:41
Horticulture, laboratory methods in teaching. 1899. p. 127.....	A10.3:65
Plants, propagation of. 1902.....	A1.9:157
See also, for report as Horticulturist in charge of experimental gardens and grounds. 1901.....	A14.1:
Corbett, W. W. Beef and beef cattle of the West. p. 326.....	A1.1:862
Corbin, S. Welford. Address of, before Virginia good roads convention, Oct. 18, 1894. p. 13.....	A22.3:11

# Index

	Classification no.
Cordley, A. B. <i>Anarsia lineatella</i> Zell, notes on. 1897. p. 71 .....	A9.6:9
Cordova, Argentina, national exhibition at. 1869. p. 371 .....	A27.9:7
Cork oak, growth of, in United States, etc. (Jones). 1895. p. 9.....	A13.3:11
Cork-tree:	
Caterpillar damaging. 1889. p. 136.....	A9.7:2
Report on. p. 550.....	A1.1:878
Corlies, James C. Pleuro-pneumonia among cattle in New Jersey, investigations of. p. 46 .....	A1.1:881-2
Corn:	
American—	
composition of, investigation of (Richardson)—	
1883 .....	A7.3:1
same, errata. 1884. p. 98 .....	A7.3:4
1884, 2d report .....	A7.3:4
in Prussia. 1868. p. 462 .....	A27.9:6
Calorimetric determination of heating value of (Richards). 1898. p. 95 .....	A10.3:49
Canning, in Maine (Boardman). 1886. p. 554.....	A27.9:24
Chicago and Milwaukee, 1862-66. p. 431 .....	A27.9:4
Comparative value of red and white kafir corn and, steer-feeding experiments to ascertain (Georgesson). p. 483 .....	A4.1:898
Cost of growing, in Illinois. 1873. p. 36 .....	A27.9:11
Crop—	
condition of, monthly notes on.....	A27.9:
statistics of, annual.....	A27.1:
Culture in South (Tracy). 1898.....	A1.9:81
Distribution and consumption of—	
1883. No. 57.....	A27.9:21
1884. No. 5.....	A27.9:22
1893. No. 102A .....	A27.9:31
1895. p. 59 .....	A27.9:32
Ear vs. corn-and-cob meal for cows (Beal). 1899. p. 16 .....	A1.9:107
Experiments with. 1872. p. 292.....	A27.9:10
Feeding values of wheat vs. 1897. p. 4 .....	A1.9:56
For fattening pigs (Duggar). p. 496 .....	A4.1:898
For silage and fodder (Gettys). 1900 .....	A3.4:24
Frosted, value of. 1863. No. 5. p. 8 .....	A27.9:1
Grazing steers on (Langworthy). 1901. p. 27 .....	A1.9:124
Insects affecting, observations on, in 1887 (Webster). p. 147.....	A1.1:887
same, notes on (Webster). 1890. p. 159 .....	A9.7:3
Moldy, feeding to animals (Langworthy). 1900. p. 26.....	A1.9:122
Planting and replanting. 1899. p. 6 .....	A1.9:92
Premium crop, in Pennsylvania. 1870. p. 478.....	A27.9:8
Production of, in New South Wales. 1893. p. 311.....	A27.9:31
Raising, expense of. 1894. p. 106 .....	A27.9:32
Runner's white. p. 186.....	A1.1:874
Smut of, is it injurious to cattle? 1898. p. 16.....	A1.9:69
Smutty—	
ill effects of, on cattle (Gamgee). 1869. p. 78 .....	A1.2:C29 <sup>1</sup>
same, p. 73 .....	A1.2:C29 <sup>2</sup>
poisonous, note on. 1869. p. 144.....	A27.9:7
Statistics of. 1875. p. 234.....	A27.9:13
Sugar, analysis of (McMurtrie). 1875. p. 176.....	A27.9:13
Sugar-cane beetle injuring, note on. 1886. p. 32.....	A9.3:12
same (Howard). 1888. p. 11.....	A9.7:1
Sweet, forcing of, under glass (Clark). 1898. p. 13 .....	A1.9:105
Varieties of (Sturtevant). 1899.....	A10.3:57
<i>See also</i> Broom corn — Crops, principal — Kafir corn — Maize, or Indian corn.	
Corn and climate, report on, relation of (Wren). 1901. p. 8.....	A29.6:29
Corn-and-cob meal for cows, ear corn versus (Beal). 1899. p. 16..	A1.9:107
Corn bill-bugs, life history of one of (Webster). 1889. p. 132 .....	A9.7:2
Corn crambid, abstract of notes on (Beckwith). 1891. p. 42.....	A9.7:4
Corn-feeding syphus-fly, report on. 1888. p. 5.....	A9.7:1
Corn fodder:	
Green, for milch cows. p. 291.....	A1.1:870
Value of. 1871. p. 470.....	A27.9:9

Corn fodder—Continued	
<i>See also</i> Corn stover.	
Corn meal as food for pigs (Plumb and Anderson). p. 463 .....	A4.1:899
Corn plant, feeding value of, at different stages of growth. 1899. p. 9.....	A1.9:97
Corn-root aphid, summary history of (Forbes). 1891. p. 233 .....	A9.7:3
Corn-root webworm, an old pest in Indiana, note on. 1886. p. 33..	A9.3:12
Corn stover:	
As a feeding stuff. 1898. p. 12.....	A1.9:84.
Feeding value of (Lindsey). 1896. p. 353.....	A1.10:896
<i>See also</i> Corn fodder.	
Corn worm. <i>See</i> Boll worm.	
Cornell University, university extension in agriculture at (Craig). 1901. p. 137 .....	A10.3:99
Cornstalk borer, larger:	
Circular relative to (Howard). 1896.....	A9.5:16
Report on (Howard). 1891. p. 95 .....	A9.7:4
Cornstalk disease in cattle:	
Cornstalks presumably cause of, chemical examination of (De Schweinitz). 1896. p. 88.....	A4.3:10
Nature, cause, and means of preventing, investigation into (Moore). 1896. p. 9.....	A4.3:10
Rabies and, report on. 1896.....	A4.3:10
Cornstalks:	
Analytical work done on, by chemical division, July-Dec., 1880 (Collier). 1881 .....	A1.6:33
Sugar determinations from, partial summary of. 1880. No. 25. p. 23 .....	A27.9:18
same. No. 27. p. 23 .....	A27.9:18
Waste in feeding (Beal). 1899. p. 16.....	A1.9:107
Cornwall, H. B. Baking powder, adulteration of. 1889. p. 583...	A7.3:13 <sup>5</sup>
Correspondence courses in agriculture (Craig). 1902. p. 50.....	A10.3:110
Corsa, William P. Nut culture in U. S., embracing native and introduced species. 1896.....	A20.2:N95
Cory, C. L. Electrical engineering laboratory in its relations to local engineering work. 1900. p. 99 .....	A10.3:76
Cossidae, North American, with facts in life history of <i>Cossus center-</i> <i>ensis</i> (Bailey). 1883. p. 49.....	A9.3:3
<i>Cossus centerensis</i> . <i>See</i> Cossidae.	
Costa Rica:	
Barometric standard of, comparison with (Abbe). 1902. p. 445.	A29.6:30
Climatology of, monthly notes on, Jan., 1901-Oct., 1902 (Pittier).	A29.6:
Meteorology in, notes on (Abbe). 1900. p. 541.....	A29.6:28
Cotswold ram "Golden fleece." p. 340 .....	A1.1:866
Cottier, Joseph. Hydrodynamics, equations of, in form suitable for application to problems connected with movements of earth's atmosphere. 1897. p. 296.....	A29.6:25
Cotton, W. E. <i>See</i> , as joint author, Schroeder, Ernest C.	
Cotton:	
Acreage of—	
1892. p. 136 .....	A27.9:30
1895. p. 245 .....	A27.9:33
American—	
deterioration of (Watts). 1873. p. 253.....	A27.9:11
future demand for (Watkins). 1901. p. 193.....	A1.10:901
future of (Newton). 1864. No. 1. p. 12.....	A27.9:2
notes on. 1864. No. 6. p. 6.....	A27.9:2
Anthracnose of, report on (Southworth). 1891. p. 100.....	A28.5:6
same (Atkinson). 1891. p. 173.....	A28.5:6
As surplus crop (Jones). 1870. p. 36 .....	A27.9:8
Average yields of, extravagant estimates of. 1866. p. 345 .....	A27.9:4
Bibliography of, supplemental. 1896. p. 423 .....	A10.3:33
Bollworm of. <i>See</i> Bollworm of cotton.	
Botany of (Evans). 1896. p. 67.....	A10.3:33
Brazil, antiquity, methods and extent of cultivation, etc. (Bran- ner). 1885.....	A1.7:8
Brief history of what it is and where it grows. p. 104.....	A1.1:862

# Index

	Classification no.
Cotton—Continued	
British trade in. 1866-67. p. 378.....	A27.9:5
Chemistry of (McBryde and Beal). 1896. p. 81.....	A10.3:33
Climatology and soils in their relation to cultivation of (Whitney). 1896. p. 143.....	A10.3:33
Climatology of (Mell).....	A29.3:8
Condition of crop, monthly notes on.....	A27.9:
Crop statistics—	
1868. p. 138.....	A27.9:6
1869. p. 354.....	A27.9:8
1874. p. 173.....	A27.9:13
1895 (Watkins).....	A27.4:4
1896-97 (Watkins).....	A27.9:35
1897-98 (Watkins).....	A27.4:9
1898-99 (Watkins).....	A27.8:17
1899-1900 (Watkins).....	A27.8:19
Cultivated varieties of (Tracy). 1896. p. 197.....	A10.3:33
Culture of, in 1866 (Cloud). p. 190.....	A1.1:866
same (Hammond). 1896. p. 225.....	A10.3:33
Date of receipt of, in Louisiana, 1857-70. p. 356.....	A27.9:8
Deterioration of (Watts). 1872. p. 211.....	A27.9:10
Diseases of (Atkinson). 1896. p. 279.....	A10.3:33
Distribution of. 1893. No. 101A.....	A27.9:31
Enemies of crop in Mexico, Central and South America, and West Indies, reports of consuls and consular agents on. 1885. App. p. 59.....	A8.1:4
Exports of, from Egypt (Hitchcock). 1897. p. 29.....	A10.3:42
same. 1897.....	A12.4:15
Fertilizers for (McBryde). 1894.....	A1.9:14
Fiji Islands, microscopic investigation of (Taylor). 1872. p. 317.....	A27.9:10
Handling and uses of (Hammond). 1896. p. 351.....	A10.3:33
History, botany, chemistry, culture, enemies, and uses. 1896...	A10.3:33
History and general statistics of (Handy). 1896. p. 17.....	A10.3:33
Imports into Great Britain—	
1866-67. p. 249.....	A27.9:5
1868. p. 459.....	A27.9:6
1869. p. 147.....	A27.9:7
1870-71. p. 324.....	A27.9:9
Imports of U. S. 1880-91. p. 664.....	A27.9:29
India crop—	
1889. p. 163.....	A27.9:28
1892-93. p. 167.....	A27.9:31
1893-94. p. 203.....	A27.9:32
1894. p. 24.....	A27.9:33
1894-95. p. 146.....	A27.9:33
Insects affecting. See Bollworm of cotton — Cotton insects.	
Low price of. 1891. p. 481.....	A27.9:29
Manufacture and consumption in world. 1876. p. 501.....	A27.9:14
Manufacture of, statistics of. 1869. p. 371*.....	A27.9:7
same. 1876. p. 105.....	A27.9:14
Manuring of (White). 1896. p. 169.....	A10.3:33
same (White). 1897.....	A1.9:48
Middling, prices of. 1851-71. p. 137.....	A27.9:9
Movement of. 1870-72. p. 451.....	A27.9:10
same, with crop estimates: 1887. p. 449.....	A27.9:25
New process of utilizing (Watts). 1876. p. 400.....	A27.9:14
Planting—	
directions for (Lyman). p. 193.....	A1.1:866
progress of. 1883. No. 59.....	A27.9:21
Production, cost of (Watkins). 1899.....	A27.8:16
Production and price of, for one hundred years (Watkins). 1895.....	A27.8:9
same, abstract.....	A27.8:C82
Production and trade of the world. 1890. p. 268.....	A27.9:28
Quality of crop, 1873, answers to circular regarding. p. 123.....	A27.9:12
Raising by free labor (Landon). p. 88.....	A1.1:864

\* By a misprint, this page number appears twice.



<b>Cotton—Continued</b>	
Raising in California. 1872. p. 493 .....	A27.9:10
Report on best sections. 1866. pp. 233, 280, 329.....	A27.9:4
Root-rot disease of, new (Atkinson). 1891. p. 262.....	A9.7:3
same, circular of inquiry on (Rusk) .....	A28.4:9
Season of 1869-70 in India. p. 361.....	A27.9:8
Spinning, atmospheric conditions favorable to, notes on (Abbe). 1900. p. 294 .....	A29.6:28
Trade in, 1868. 1868. p. 364.....	A27.9:6
Under high culture (Gift). p. 409.....	A1.1:867
Wilt disease of (Smith). 1899.....	A28.3:17
same (Orton), 1900 .....	A28.3:27
World's supply and consumption of. 1894. p. 246.....	A27.9:32
<i>See also</i> Augusta, Ga., Congress of cotton States—Boll worm of cotton—Crops, principal—Egyptian cotton—Flax-cotton— Raw cotton.	
Cotton and currency, 1895.....	A27.8:C82
Cotton army worm, origin of, and best means of destroying (Jones). 1878. p. 356 .....	A9.2:C82
<b>Cotton-belt:</b>	
Forecast stations of Weather Bureau, establishment and inspection of (Marbury). 1899. p. 150.....	A29.3:24
Forecast stations of Weather Bureau in, instructions governing. 1892 .....	A29.12:C82
same (Berry). 1897 .....	A29.12:C81
Report on (Smith). 1885. p. 59.....	A8.1:4
Cotton-boll weevil. <i>See</i> Mexican cotton-boll weevil.	
<b>Cotton caterpillar:</b>	
Brazil (Branner). 1885. App. p. 49 .....	A8.1:4
Letter on (Morse). 1867. p. 249 .....	A27.9:5
Cotton convention. <i>See</i> Atlanta, Ga.	
Cotton cutworm, note on (Atkinson). 1891. p. 31.....	A9.7:4
<i>See also</i> Cutworms.	
Cotton Exchange and Agriculture Department reports. 1886. p. 496.	A27.9:24
Cotton exchanges, list of. 1899. p. 759.....	A1.10:899
Same, 1901. p. 696.....	A1.10:901
<b>Cotton insects:</b>	
Bahama Islands (Schwarz). 1878. p. 347 .....	A9.2:C82
Field. 1898. p. 85.....	A9.6:18
Georgia and Florida (Grote). 1878. p. 351.....	A9.2:C82
<b>Injurious—</b>	
in Brazil, preliminary report of observations upon (Branner). 1884. p. 63 .....	A9.3:4
notes on. 1866. pp. 239, 282, 331, 377, 421 .....	A27.9:4
same, 1867. p. 21 .....	A27.9:5
remedies for (Weed). 1893. p. 167.....	A9.7:6
Investigation of. p. 210 .....	A1.1:878
same, p. 5 .....	A9.1:879
Kerosene experiments with. 1883 .....	A9.3:1
Mississippi, notes on (Ashmead). 1894. pp. 25, 240, 320.....	A9.7:7
Protection against (Glover). 1873. p. 571.....	A27.9:11
<b>Report on—</b>	
1879 (Comstock).....	A9.2:C82
1885 (Stelle). App. p. 7.....	A8.1:4
Résumé of more important chapters of report upon. p. 263.....	A1.1:879
United States (Howard). 1896. p. 317.....	A10.3:33
same, with introduction. 1897.....	A1.9:47
<i>See also</i> Bollworm of cotton—Cotton caterpillar—Cotton cut- worm—Cotton plant-louse—Cotton worm—Mexican cotton- boll weevil.	
Cotton machinery, adaptation of flax-cotton to (Jackson). p. 405...	A1.1:862
Cotton or melon plant-louse, report on (Pergande). 1895. p. 309...	A9.7:7
<b>Cotton seed:</b>	
Exports of. 1887. p. 450 .....	A27.9:25
Products of, feeding value of (Kilgore). 1896. p. 385.....	A10.3:33
Value of, to farmer (Beal). 1901. p. 24.....	A1.9:124
Cotton seed and its products. 1896 .....	A1.9:36

# Index

	Classification no.
Cotton-seed industry (Daugherty). 1901. p. 285 .....	A1.10:901
Cotton-seed meal:	
Effect of, on quality of butter (Allen). 1900. p. 24 .....	A1.9:119
Fertilizers containing, determination of available phosphoric acid in (Dancy). 1890. p. 161 .....	A7.3:28
Metaphosphoric and pyrophosphoric acids in, occurrence of (Hardin). 1892. p. 50 .....	A7.3:35
Nitrification of, in different soils (Withers and Fraps). 1902. p. 36 .....	A7.3:67
Cotton stainer or red bug:	
Parasite of supposed eggs of (Howard). 1889. p. 241 .....	A9.7:1
Report on. 1889. p. 234 .....	A9.7:1
Cotton States, agriculture in, condition of (Howard). p. 215 .....	A1.1:874
<i>See also</i> Southern States.	
Cotton States and International Exposition, Atlanta, Ga., 1895 <i>See</i> Atlanta, Ga.	
Cotton worm or aletia:	
Address on, before cotton convention at Atlanta. 1881 (Riley). p. 153 .....	A1.1:881-2
same. p. 153 .....	A9.1:882 •
Aggregate damage from, in Texas, cotton crop of 1887 (Snow). 1889. p. 32 .....	A9.7:2
Anatomy of (Minot and Burgess). 1885. p. 45 .....	A8.1:4
Circular no. 7 on. p. xxviii .....	A8.1:4
same, answers to circular. App. p. 71 .....	A8.1:4
Destruction of, by birds (Redfield). 1883. No. 65. p. 25 .....	A27.9:21
Final report on (Riley). 1885 .....	A8.1:4
Georgia, in 1878 (Willet). 1878. p. 358 .....	A9.2:C82
Habits and natural history of (Trelease). 1878. p. 361 .....	A9.2:C82
Letter on (Ferguson). 1867. p. 288 .....	A27.9:5
Machinery designed for destruction of, experimental tests of (Barnard)—	
1883. p. 39 .....	A9.3:3
1885. p. 191 .....	A8.1:4
Mississippi, in 1878 (Anderson). p. 352 .....	A9.2:C82
Notes on (Glover). 1874. p. 429 .....	A27.9:12
Observations and experiments upon—	
1883 (Neal). p. 38 .....	A9.3:1
1883 (Jones). p. 47 .....	A9.3:1
1883 (Johnson). p. 53 .....	A9.3:1
Question in 1894, report on (Schwarz). 1895. p. 315 .....	A9.7:7
Report on (Hubbard). App. p. 5 .....	A8.1:4
Same, 1880-1882. (Anderson). p. 37 .....	A8.1:4
Same, (Jones). 1885. p. 55 .....	A8.1:4
Texas, south, in spring and early summer of 1883, report upon (Anderson). 1883. p. 31 .....	A9.3:3
Cottontail bot, further notes on, with breeding and identification of fly (Townsend). 1893. p. 317 .....	A9.7:5
Cottonwood, cimex injuring, in Nebraska (Webster). 1890. p. 228 .....	A9.7:2
Cottonwood beetle, striped, report on (Lintner). 1895. p. 69 .....	A9.6:2
Cottonwood borer, great damage by, note on. 1886. p. 41 .....	A9.3:12
Cottony cushion-scale:	
Experiments on (Koebele). p. 558 .....	A1.1:886
Remedies for (Coquillett). p. 552 .....	A1.1:886
<i>See also</i> Scale insects.	
Cottrell, H. M., Burtis, F. C., and Otis, D. H. Dairy cow, feed and care of. p. 450 .....	A4.1:899
Coulter, John M.:	
Apetalæ of western Texas, description of. 1894. p. 347 .....	A6.5:2
Cactus, anhalonium, and lophophora, North American species of, preliminary revision of. 1892. p. 91 .....	A6.5:3
Echinocactus, cereus, and opuntia, preliminary revision of. 1896. p. 355 .....	A6.5:3
Gamopetalæ of western Texas. 1892. p. 153 .....	A6.5:2
Monocotyledons of western Texas, description of. 1894. p. 421 .....	A6.5:2
Phanerogams and pteridophytes of western Texas, manual of. 1891-94 .....	A6.5:2

	Index Classification no.
Coulter, John M.—Continued	
Polypetalæ of western Texas, description of. 1891. p. 6.....	A6.5:2
Rio Grande, region of, in Texas, from Brazos Santiago to El Paso County, collection of plants made by G. C. Nealley, report on. 1890. p. 29.....	A6.5:1
Coulter, John M., and Rose, Joseph Nelson:	
Hesperogenia, a new genus of umbelliferæ from Mount Rainier. 1899. p. 203 .....	A6.5:5
Leibergia, a new genus of umbelliferæ from the Columbia River region. 1896. p. 575 .....	A6.5:3
Mexican umbelliferæ, mostly from the State of Oaxaca, recently collected by C. G. Pringle and Edward William Nelson, report on. 1895. p. 289.....	A6.5:3
Umbelliferæ, North American, monograph of. 1900. p. 9.....	A6.5:7
Country roads. See Roads.	
Country slaughterhouse as a factor in spread of disease (Stiles). 1896. p. 155 .....	A1.10:896
Court, meteorological records in (Linney). 1902. p. 180.....	A29.3:31
Same (Lyons). 1902. p. 183 .....	A29.3:31
Cousins, H. H. Climatological data for Jamaica. Sept., 1902. p. 444 .....	A29.6:30
Same, Oct., 1902, p. 487.....	A29.6:30
Cover crops grown to protect trees and improve soil of orchards. 1899. p. 12 .....	A1.9:87
Coville, Frederick Vernon:	
Botany, text-books on. 1899. p. 154.....	A29.6:27
Botany division, Agriculture Department—	
list of publications of.....	A6.4:30
work of, for farmer. 1897. p. 90 .....	A1.10:897
Crepis occidentalis and its allies. 1896. p. 559.....	A6.5:3
Crimson clover hair balls, circular on. 1896.....	A6.4:8
Death Valley expedition, botany of. 1893 .....	A6.5:4
Forest growth and sheep grazing in Cascade Mountains of Oregon. 1898 .....	A13.3:15
Klamath Indians of Oregon, notes on plants used by. 1897. p. 87.	A6.5:5
Mushroom poisoning in D. C., recent cases of, observations on ...	A6.4:13
Plant breeding and seed selection .....	A6.2:P69
Vegetable dietary, our, some additions to. p. 205 .....	A1.10:895
Weeds, noxious, report on—	
1889. p. 382 .....	A1.1:889
same, p. 382 .....	A6.1:889
1890. p. 388 .....	A1.1:890
same, p. 388 .....	A6.1:890
Yakutat Bay, Alaska, botany of, with field report by Frederick Funston. 1895. p. 325.....	A6.5:3
See also, for reports as Botanist, Botany division, Agriculture Department. 1893–1901 .....	A6.1:
Covington area, Georgia, soil survey of (Marean). p. 329 .....	A26.5:901 <sup>1</sup>
Cowgill, E. B.:	
Sorghum-sugar industry in Kansas. 1888. p. 18 .....	A7.3:17
same, abstract, p. 223 .....	A1.1:887
Cowpeas:	
Fattening pigs (Duggar). p. 496 .....	A4.1:898
Food for hogs (Duggar). p. 501.....	A4.1:898
Grazing steers on (Langworthy). 1901. p. 27 .....	A1.9:124
Report on (Smith).....	A1.9:89
same, p. 287 .....	A1.10:896
same .....	A3.4:5
Resistant to root knot (Webber and Orton). 1902. p. 22.....	A19.3:17
Silage and fodder (Gettys). 1900.....	A3.4:24
Wilt disease of—	
1899 (Smith) .....	A28.3:17
1902 (Orton). p. 9 .....	A19.3:17
Cows:	
Abortion in. 1869. p. 299* .....	A27.9:7

\* By a misprint, this page number appears twice.

# Index

Classification no.

## Cows—Continued

### Dairy—

feed and care of (Cottrell, Burtis, and Otis). p. 450 ..... A4.1:899  
scale of points for judging, regardless of breeds. 1900. p. 737. A1.10:900  
type of, in relation to milk and butter production (Lawson).

1901. p. 28..... A1.9:124

weather and. 1902. p. 28 ..... A1.9:149

Decrease of. 1865. No. 4. p. 13 ..... A27.9:3

Ear corn versus corn-and-cob meal for (Beal). 1899. p. 16 ..... A1.9:107

Gestation in. 1898. p. 18..... A1.9:103

Healthy and diseased, effect of tuberculin injections upon milk  
of (De Schweinitz). 1896. p. 15 ..... A4.3:13

Manure from, fertilizing value of. 1899. p. 5..... A1.9:97

### Milch—

food of, do volatile acids in, occur in milk? (Weiske). 1890.  
p. 141 ..... A7.3:24

green corn fodder for. p. 291..... A1.1:870

light versus heavy grain feeding for (Allen). 1900. p. 25.... A1.9:119

metabolism of, investigations on (Hagemann). 1899. pp. 803,  
903 ..... A10.6:10

Poor vs. good. 1897. p. 3 ..... A1.9:56

Profitable and unprofitable, statement of (Allen). 1900. p. 21.. A1.9:114

Scrub, milking of. p. 491 ..... A4.1:898

Stall for, improved. 1901. p. 30 ..... A1.9:144

Testing, as to milk and butter production, some notes in connec-  
tion with (Scovell). 1899. p. 123 ..... A10.3:65

### Tuberculous—

feeding calves with milk of (Wilcox). 1899. p. 23 ..... A1.9:107

milk of, observation of presence of tubercle bacilli in, when  
udder is not visibly diseased (Smith and Schroeder). 1893.  
p. 60 ..... A4.3:3

*See also* Animals—Cattle—Dairy—Milk.

Cows and cattle of foreign countries (Pearson). 1896. p. 38..... A4.3:11

Cows' milk. *See* Milk.

Cox, Henry J.:

Chicago weather forecast district, monthly report of—

Sept.—Dec., 1898 ..... A29.6:26

Jan.—May, Sept.—Nov., 1899 ..... A29.6:27

Jan.—June, Sept.—Dec., 1900 ..... A29.6:28

Jan.—March, May, June, Sept., Nov., Dec., 1901 ..... A29.6:29

Jan.—March, May—Oct., 1902 ..... A29.6:30

Storm signals on Great Lakes. 1899. p. 152 (erroneously printed  
J. H. Cox) ..... A29.3:24

Temperature, should verifying change of, be smaller, and should  
not terms "slightly warmer" or "slightly cooler" be credited?  
1902. p. 127..... A29.3:31

Weather forecasts best calculated to aid maritime interests of  
Great Lakes; method of reaching those interested. 1899. p. 19. A29.3:24

Cragin, Harry W. and H. S.:

Thunderstorms, local, observations for, at Skyland, Page County,  
Va. 1900. pp. 328, 389..... A29.6:28

Thunderstorms near Washington, D. C., report on. 1900. p. 287. A29.6:28

Craig, John:

Agriculture correspondence, courses in. 1902. p. 50 ..... A10.3:110

Cornell University, university extension in agriculture at. 1901.  
p. 137 ..... A10.3:99

Pomological nomenclature, proposed code for. 1899. p. 130 .... A10.3:65

Craig, John A.:

Sheep feeding. 1897 ..... A1.9:49

Stock, pure-bred, business of breeding. p. 416..... A4.1:901

Crambid. *See* Corn crambid.

Crampton, C. A.:

Baking powders—

adulteration of. 1889. p. 555 ..... A7.3:13<sup>6</sup>

character and constitution of. p. 163 ..... A7.1:889

Beers, wines, and ciders, composition of, and substances used in  
their adulteration. p. 183..... A1.1:887

<b>Crampton, C. A.—Continued</b>	
Des Lingues sugar experiment station, Baldwin, La., record of experiments at, season of 1888 .....	A7.3:22
Fats, crystallization of. 1889. p. 449.....	A7.3:13 <sup>4</sup>
Fermented alcoholic beverages, malt liquors, wine, and cider, adulteration of. 1887. p. 263.....	A7.3:13 <sup>3</sup>
Sugar-cane and beet juices, analysis of; with table for calculation of analyses. 1884. p. 31 .....	A7.3:15
same, at Fort Scott, Kans. 1887. p. 15.....	A7.3:17
<i>See also</i> , as joint author, Denton, Albert A.	
<b>Crampton, C. A., and Fake, N. J.:</b>	
Chemical work done at Fort Scott in sorghum-sugar experiments, 1887, summary of. p. 221.....	A1.1:887
same, p. 15. [Fake is not mentioned in this print.] .....	A7.3:17
Sorghum analysis at Fort Scott, Kans., in 1887. p. 5.....	A7.3:18
<b>Cranberries:</b>	
Insects affecting, report on (Smith). p. 393.....	A1.1:884
same, p. 9 .....	A9.3:4
Interest in U. S. in, in 1869. p. 204.....	A1.1:869
Production of, 1872-74. p. 535 .....	A27.9:12
Rotting of, and a proposed remedy (Beal). 1900. p. 9.....	A1.9:114
<b>Cranberry culture:</b>	
New Jersey (Taylor). p. 569.....	A1.1:877
Report on (Phinney). p. 131 .....	A1.1:863
same (Saunders). 1894.....	A1.9:13
Cranberry fireworm, probable remedy for (Kirkland). 1899. p. 53.	A9.6:20
Cranberry gall fungus, treatment of (Halsted). 1891. p. 18 .....	A28.5:6
Cranberry girdler, report of (Scudder). 1894. p. 1 .....	A9.7:7
Cranberry leaf-galls, report on (Thomas). 1889. p. 279.....	A9.7:1
Cranberry rot, microscopic observations on (Taylor). 1875. p. 445.	A27.9:13
Same (Taylor). 1876. pp. 45, 350 .....	A27.9:14
Cranberry rot and scald, microscopic observations on (Taylor). 1874.	
p. 439.....	A27.9:12
Same (Taylor). 1875. p. 42.....	A27.9:13
Cranberry scald, treatment of (Halsted). 1891. p. 18 .....	A28.5:6
Crane, Arthur B. Long-range weather forecasts, can they be made with any degree of accuracy or profit? 1899. p. 157.....	A29.3:24
Crane, Edward P. Hanover, Germany, cost of hauling farm products over wagon roads at. p. 6.....	A22.4:27
Crane-fly, larvæ of, destroying young wheat in Indiana (Webster). 1890. p. 12 .....	A9.7:3
<b>Craw, Alexander:</b>	
Nursery stock and orchards, inspection of. 1900. p. 87 .....	A10.3:76
Scale insects found upon plants entering port of San Francisco, list of. 1896. p. 40 .....	A9.8:4
<i>See also</i> , as collector, Cockerell, Theodore Dru Alison.	
Crayfish, carbon bisulphide for (Weed). 1895. p. 98 .....	A9.6:2
<b>Cream:</b>	
Comparative amount of, from deep or shallow setting of milk. 1872. p. 513 .....	A27.9:10
Composition of (Brown). 1872. p. 311 .....	A27.9:10
<b>Pasteurized—</b>	
commercial butter cultures used in connection with (Allen). 1898. p. 21 .....	A1.9:103
restoring consistency of. 1898. p. 23 .....	A1.9:69
Potted sweet. 1900. p. 215.....	A4.1:899
Raising, by dilution (Lawson). 1899. p. 28.....	A1.9:105
<i>See also</i> Milk—Potash, bichromate of.	
"Cream pot" stock, history of (Slingerland). p. 291 .....	A1.1:866
<i>See also</i> Jaques "Cream pot" stock.	
<b>Creameries or butter factories, advantages, location, organization, and equipment (Alvord). 1896. p. 297 .....</b>	
<i>See also</i> Dairy.	
Creasy, William T. Farmers' views of good roads, and how to get them. 1901. p. 78.....	A22.3:21
Creatin and creatinin, physiological effect of, and their value as nutrients (Mallet). 1899 .....	A10.3:66

# Index

	Classification no.
Credit, popular, French congress on. 1895. p. 26.....	A27.9:33
Credit associations, cooperative, in European countries and their relation to agricultural interests (Peters). 1892.....	A27.8:3
Credit unions, cooperative, of Germany. 1891. p. 339 .....	A27.9:29
Creelman, G. C.:	
Farmers' institutes in Ontario. 1902. p. 32.....	A10.3:110
Ontario, farmers' institute work accomplished in. 1902. p. 26 ..	A10.3:120
Live stock, judging of, as farmers' institute work. 1902. p. 113 ..	A10.3:120
<i>See also</i> , as editor, Farmers' Institute Workers, American Association of.	
Crepis occidentalis and its allies (Coville). 1896. p. 559 .....	A 6.5:3
Cricket:	
Tree, carnivorous habits of (Murtfeldt) 1889. p. 130 .....	A9.7:2
Western, outbreaks of, in Idaho, report on (Milliken). 1893. p. 17 .....	A9.7:6
Crime. <i>See</i> Climate and Crime.	
Crimson clover:	
Circular on (Williams). 1899 .....	A3.4:17
Danger in use of. 1897. p. 11 .....	A1.9:65
Hair balls, circular on (Coville). 1896.....	A6.4:8
Importance of, as a forage plant. 1898. p. 8.....	A1.9:69
Seed of (Pieters).....	A6.4:18
<i>See also</i> Clover.	
Critchett, O. A. Irrigation and water rights, abstract of laws of the several States and Territories on. 1893.....	A15.3:1
Cronk, Corydon P. Wind vanes. 1899. p. 165 .....	A29.3:24
Crop bulletins, climate and.....	A29.7:
Crop circulars, Statistics Division, Agriculture Department .....	A27.5:
Crop correspondents, manual of instructions to (Robinson).....	A27.2:C88
<i>See also</i> Climate and crop correspondents.	
Crop reporter, Statistics Division, Agriculture Department.....	A27.6:
Crop reports:	
Indications of, vs. estimates. 1892. p. 70 .....	A27.9:30
National and international, paper on (Chamberlain). p. 137....	A1.8:22
Newspaper. 1874. p. 427 .....	A27.9:12
Plea for systematic. 1872. p. 434.....	A27.9:10
same. 1873. p. 27 .....	A27.9:11
Report concerning. 1886. p. 394 .....	A27.9:24
Standard of condition in. 1889. p. 470.....	A27.9:27
Crop service. <i>See</i> Climate and crop service.	
Crop synopsis, monthly, Statistics Division, Agriculture Department.	A27.7
Crop zones. <i>See</i> Zones, life and crop.	
Crops:	
Amounts and injuries of, in 1864, table showing. No. 6. p. 28..	A27.9:2
Argentina. 1887. p. 382 .....	A27.9:25
California and Colorado. 1890. p. 520 .....	A27.9:28
Climate and—	
notes on (Kimball). 1901. p. 564.....	A29.6:29
problem with two solutions (Abbe). 1901. p. 419.....	A29.6:29
Climatology of Florida with regard to (Mitchell). 1902. p. 208.	A29.3:31
Common, value of, for forage. 1897. p. 5 .....	A1.9:65
<i>See also</i> Forage crops.	
Condition of, monthly report on, June, 1863, to Nov., 1897 .....	A27.9:
<i>See also</i> Climate and crop conditions — Weather and crop conditions.	
Continuation and rotation of, experiments in, at Rothamsted Experiment Station, England, lectures on (Gilbert). 1893.....	A10.3:22
Depending on meteorological conditions, notes on (Abbe). 1900. p. 397.....	A29.6:28
Distributed, cultural directions for. 1902 .....	A19.2:F74
Distribution of, some physical properties of soils in relation to (Whitney). 1892 .....	A29.3:4
English, and prices, 1861-65. p. 210.....	A27.9:4
same. 1870. p. 361 .....	A27.9:8
European prospects (Moffat). 1883. No. 61, p. 34. No. 64, p. 28. No. 65, p. 29. No. 1, p. 18.....	A27.9:21



**Crops—Continued**

Experiments with. 1874. p. 387 .....	A27.9:12
Fall sown, condition and amount of, for 1864, table showing. No. 6, p. 29.....	A27.9:2
Fertilizer, requirements of (Beal). 1899. p. 5 .....	A1.9:107
Foreign— official statistics of—	
1890. p. 155 .....	A27.9:28
1891. p. 276 .....	A27.9:29
1893. p. 119 .....	A27.9:32
1894. p. 752 .....	A27.9:32
state of. 1864. No. 5. p. 14.....	A27.9:2
Germany, 1870 (Prentiss). p. 283 .....	A27.9:8
Growing, effect upon soils. 1897. p. 684 .....	A1.10:897
Indiana and Illinois (Osborn). 1891. p. 483 .....	A27.9:29
Insects beneficial to (Glover). 1875. p. 175 .....	A27.9:13
Monthly reports on condition of, etc. 1863 to 1897 .....	A29.7:
Nitrogen of our, determinations by experiments at Rothamsted (Lewes and Gilbert). 1882. p. 142 .....	A1.8:31
Ontario. 1887. p. 453.....	A27.9:25
same, 1890. p. 484.....	A27.9:28
Overproduction of. 1892. p. 73 .....	A27.9:30
Pacific States. 1864. No. 5. p. 19.....	A27.9:2
Pests of, and their repression by law (McCarthy). 1897. p. 19 .....	A1.8:57
Prices of. 1864. No. 1. p. 28. No. 2. p. 20.....	A27.9:3
Principal— acreage, production, and value of. 1897. No. 155 .....	A27.9:35
statistics of—	
1895. p. 526 .....	A1.10:895
1896. p. 558 .....	A1.10:896
1897. pp. 689; 710.....	A1.10:897
1898. p. 678 .....	A1.10:898
1899. p. 759 .....	A1.10:899
1900. p. 753 .....	A1.10:900
1901 p. 697 .....	A1.10:901
wholesale prices of. 1898. p. 695 .....	A1.10:898
Profitable for pigs. 1901. p. 27.....	A1.9:133
Rainfall of season 1897 (Henry). p. 607 .....	A1.10:897
Reporting, methods in. 1889. p. 220.....	A27.9:27
Reporting stations, voluntary (Walz). 1898. p. 208.....	A29.6:26
Results of, publicity of. 1889. p. 468 .....	A27.9:27
Rotation of— experiments in, at Rothamsted Experiment Station, England, lectures on (Gilbert). 1893 .....	A10.3:22
necessity and method of (Little). 1883. p. 85 .....	A1.8:36
report on. 1901. p. 8.....	A1.9:144
Sweden (Andrews). 1873. p. 363 .....	A27.9:11
Soil and, note on. 1892-98 (Abbe). p. 16.....	A29.6:28
Soils in their relation to production of (Whitney). 1894. p. 129.....	A1.10:894
Statistics of—	
1865. pp. 19, 73.....	A27.9:4
Aug., 1866. p. 350 .....	A27.9:4
Nov., 1866. p. 442 .....	A27.9:4
Statistics of, international. 1875. p. 32 .....	A27.9:13
Tests of averages of. 1892. p. 382 .....	A27.9:30
Value of, per acre, average. 1866. p. 249 .....	A27.9:4
Winds injurious to vegetation and (Curtis). 1895. p. 435 .....	A29.3:11 <sup>2</sup>
Yield of, per acre—	
1864. No. 1. p. 28; No. 2. p. 20.....	A27.9:3
1884. No. 13.....	A27.9:22
1885. No. 24.....	A27.9:23
1886. No. 35.....	A27.9:24
1887. No. 46.....	A27.9:25
1888. No. 57.....	A27.9:26
1889. No. 68.....	A27.9:27
1890. No. 79.....	A27.9:28

# Index

	Classification no.
Crops—Continued	
Yield of, per acre—Continued	
1891. No. 90.....	A27.9:29
1892. No. 99A.....	A27.9:30
1894. pp. 629, 682.....	A27.9:32
See also Agriculture—Agricultural products—Cereal crops—Cereals—Climate and crop—Cover crops—Farm products—Field crops—Forage crops—Fruit crop—Garden crops—Grains—Hay—Hop crops—Market-garden crops—Orchard crops—Root crops—Tobacco—and headings beginning Crop.	
Crosby, D. J. Agricultural colleges and experiment stations, American, sixteenth annual convention of association of 1902, report on. 1902. p. 313.....	A10 6:14
See also, as editor, Farmers' Institute Workers, American Association of; as joint author, True, Alfred Charles.	
Crosby, J. Schuyler. Borax as a preservative of butter, letter relating to. p. 576.....	A1.1:878
Crossfield and Totten purchase. See Hosmer, Ralph Sheldon, and Bruce, Eugene S.	
Crow blackbirds and their food (Beal). 1894. p. 233.....	A1.10:894
Crows:	
Carrion, communication of hog cholera by (Ford). p. 325.....	A4.1:895-6
Common, of U. S. (Barrows). 1895. p. 9.....	A5.3:6
Food of, special report on (Barrows). p. 498.....	A1.1:888
same. p. 498.....	A5.1:888
Insect food of (Schwarz). 1895. p. 57.....	A5.3:6
Crozier, A. A. Fungicides, effects of certain, upon vitality of seeds. 1891. p. 8.....	A28.5:6
Crude fiber. See Fiber.	
Cruelty to animals, prevention of, in District of Columbia, bill relative to, etc. 1896.....	A1.4:4
Crump, M. H.:	
Address of—	
before convention of National League for Good Roads, Washington. 1893. p. 45.....	A10.3:14
before National Road Conference, July, 1894. p. 32.....	A22.3:10
Kentucky highways, history of old and new systems. 1895.....	A22.3:13
Crustacea of Tres Marias Islands, Mexico, notes on (Rathbun). 1899. p. 73.....	A5.5:14
Crystals, snow, notes on (Abbe). 1901. p. 118.....	A29.6:29
Cryptogamic growths, presence of, in fluids of diseased cattle (Billings and Curtis)—	
1869. p. 174.....	A1.2:C29 <sup>1</sup>
same. p. 156.....	A1.2:C29 <sup>2</sup>
1871.....	A1.2:C29 <sup>5</sup>
Cryptophasa unipunctata, habits and earlier stages of, in Australia, notes on (Edwards). 1891. p. 384.....	A9.7:3
Cuba:	
Cattle for, inspection and certification of. 1899.....	A4.5:39
Climate of—	
also note on weather of Manila (Phillips). 1898.....	A29.3:22
report on (Phillips). 1899. p. 307.....	A29.1:898
Cocoanut palms in, diseased, report of investigation of (Busck). 1902. p. 20.....	A9.6:38
Dairy conditions in (Pearson). p. 383.....	A4.1:901
Our trade with, 1887-1897.....	A12.4:16
Population and resources. 1898. p. 670.....	A1.10:898
Sugar and molasses crops of, 1870-71. 1871. p. 326.....	A27.9:9
Venezuelan cattle to, shipments of (Ellsworth). p. 516.....	A4.1:899
See also Firmeza—Havana.	
Cuba and other islands of West Indies, industries of, value of climate and crop and storm-warning services of Weather Bureau to (Hayes). 1902. p. 58.....	A29.3:31
Cuban pine (Mohr). 1896. p. 75.....	A13.3:13 <sup>1</sup>
Same, with additional notes by Filibert Roth. 1897. p. 79.....	A13.3:13 <sup>2</sup>

	<b>Index</b>
	<b>Classification no.</b>
Cuckoos, food of (Beal). 1898 .....	A5.3:9
Cuckoos and shrikes in their relation to agriculture. 1898 .....	A5.3:9
Cucumber beetles:	
Notes on (Chittenden). 1898. p. 27 .....	A9.6:10
Striped, circular relating to (Chittenden). 1898 .....	A9.5:31
Cucumbers, Znaim, cultivation of (Fairchild). 1901 .....	A23.4:2
Cucurbitaceæ. <i>See</i> Roseanthus.	
Cucurbits, crossing of (Pammel). 1893. p. 94 .....	A10.3:16
Cull, Edward L.:	
Beet and beet-root sugar. 1873. p. 366 .....	A27.9:11
Beet-sugar industry. 1873. p. 441 .....	A27.9:11
Cultivation by steam:	
American inventions for (Brainerd). p. 253 .....	A1.1:867
Report on (Lawrence). 1872. p. 358 .....	A27.9:10
<i>See also</i> Steam cultivation.	
Cultures, tubercle bacilli found in, branched forms of (Dorset). p. 572 .....	A4.1:901
Culver, Garry E.:	
Artesian-wells investigation, field geologists' report for North and South Dakota. 1890. p. 55 .....	A15.2:Ar7
Dakota basin, geological conditions of. pt. 3, p. 195 .....	A15.2:Ir7 <sup>2</sup>
Cuprous oxid. <i>See</i> Sugars.	
Curculio:	
How to kill. 1870. p. 229 .....	A27.9:8
Jarring for, on extensive scale in Georgia, with list of insects caught (Scott and Fiske). 1902. p. 24 .....	A9.6:31
<i>See also</i> Plum curculio.	
Curculionidæ, breeding and other habits of some species of, espe- cially of genus <i>Tyloderma</i> , notes on (Webster). 1889. p. 109.	A9.7:2
Curd test in cheese making. 1898. p. 24 .....	A1.9:84
Curds, gassy and tainted, investigations as to cause of. 1899. p. 25.	A1.9:92
Cureton, Stephen. Tillage and products of soil on irrigated lands. 1887. p. 282 .....	A15.2:P94 <sup>1</sup>
Currant stem-girdler. Report of (Marlatt). 1894. p. 296 .....	A9.7:6
Same (Marlatt). 1895. p. 387 .....	A9.7:7
Currency and coins of U. S. 1898. p. 676 .....	A1.10:898
Currency and cotton. 1895 .....	A27.8:C82
Current chart of Great Lakes. 1892 .....	A29.2:C93
Currents:	
Lake Ontario, notes on (Abbe). 1894. p. 259 .....	A29.6:21
Ocean (Page). 1902. p. 397 .....	A29.6:30
<i>See also</i> Japan current — Winds and currents.	
Curryer, J. C. Farmers' institutes, illustration and demonstration work at. 1902. p. 52 .....	A10.3:110
Curtice, Cooper:	
Hypoderma bovis, larvæ of. 1890. p. 207 .....	A9.7:2
Maryland, outbreaks of southern cattle fever in. p. 429 .....	A4.1:887-8
Sheep, animal parasites of. 1890 .....	A4.2:Sh4 <sup>1</sup>
Tapeworm disease of sheep of western plains. p. 167 .....	A4.1:887-8
Tuberculosis among cattle, detection of. p. 283 .....	A4.1:895-6
Curtis, Edward. <i>See</i> , as joint author, Billings, John Shaw.	
Curtis, F. D. Swine, address on. 1883. p. 148 .....	A1.7:2
Curtis, George E.:	
Rainfall, causes of, with relation to surface conditions. p. 187...	A13.3:7
Rainfall and charts of rainfall. 1902. p. 234 .....	A29.6:30
Winds injurious to vegetation and crops. 1895. p. 435 .....	A29.3:11 <sup>2</sup>
Curtis, H. E. <i>See</i> , as joint author, Scovell, Melville Amasa.	
Curtis, Thomas D.:	
Butter standard, paper relative to. 1883. p. 142 .....	A1.7:2
Cheese, production of, information relative to. 1870. p. 355....	A27.9:8
Curtiss, Charles Franklin:	
Beef production, some essentials in. 1898 .....	A1.9:71
same, p. 48 .....	A4.1:897
Sheep, raising for mutton. 1899 .....	A1.9:96
Stock-feeding experiments, significance of. 1899. p. 116 .....	A10.3:65
<i>See also</i> , as joint author, Wilson, James.	

# Index

	Classification no.
Curtiss, Charles Franklin, and Wilson, James W.:	A4.1:898
Lambs, range, feeding of. p. 469.....	A4.1:898
Lambs, further experiments in feeding. p. 466.....	
Curtiss, D. S.:	
Destitute regions, water for. p. 230.....	A1.1:867
Steam cultivation, progress in. p. 263.....	A1.1:867
Curtiss, George G. Apple, bitter rot of, treatment of. 1890. p. 38.	A6.3:11
Curve of comfort. <i>See</i> Temperatures, sensible.	
Cushing, Caleb. Agriculture in Spain. -p. 287.....	A1.1:876
Custer County, Colorado, fungi of (Cockerell). 1889. p. 84.....	A28.5:5
Customs duties:	
European, on agricultural products. 1885. No. 18. p. 39.....	A27.9:23
Foreign. 1886. p. 32.....	A27.9:24
Customs tariff in Martinique. 1893. p. 209.....	A27.9:31
Cutaneous disease among cattle, outbreak of. 1890. p. 361.....	A4.1:889-90
Cuthbertson, David:	
Fog and frost formation. 1902. p. 125.....	A29.6:30
Weather Bureau stations, should compensation be allowed persons not employed in Bureau while learning station duties to enable them to perform such duties in case of emergency? 1899. p. 127.....	A29.3:24
Cutter, William Parker:	
Agricultural literature, suggested classification for. 1899. p. 50.	A10.3:65
Library of Agriculture Department, work of. 1897. p. 220.....	A1.10:897
Ruffin, Edmund; pioneer in agricultural science. 1895. p. 493.	A1.10:895
<i>See also</i> , for reports as Librarian, Library Agriculture Department, 1894-1900.....	A17.1:
Cutworms:	
Anthrax parasitic on. 1890. p. 353.....	A9.7:2
Note on (Glover). 1875. p. 221.....	A27.9:13
Remedies for (Smith). p. 273.....	A1.1:885
same (Bennett), p. 274.....	A1.1:885
Variegated, report on (Chittenden). 1901.....	A9.6:29
<i>See also</i> Cotton cutworm.	
Cycles, chronological, note on (Abbe). 1900. p. 557.....	A29.6:28
Cyclone, The, a poem (Allen). 1902. p. 270.....	A29.6:30
Cyclones:	
Development and movement of, as shown in morning and evening weather maps, Apr. 2-6, 1892 (Marvin). 1893.....	A29.2:C99
Hurricanes, tornadoes, and (Bigelow). 1898. p. 525.....	A1.10:898
Martinique, of Aug. 18, 1891. p. 185.....	A29.6:19
Mauritius, of Dec. 5, 1897 (Claxton). p. 62.....	A29.6:28
Nicaragua, report on (Clancy). 1897. p. 356.....	A29.6:25
Report on (Watts). 1899. p. 307.....	A29.6:27
Tropical, atmospheric circulation in, as shown by movements of clouds (Boyer). 1896.....	A29.2:At6 <sup>1</sup>
Warm regions in (Abbe). 1894. p. 77.....	A29.6:22
West India, wind direction at different altitudes around (Boyer). 1892. p. 50.....	A29.6:20
Cyclonic storms, notes on (Abbe). 1899. p. 154.....	A29.6:27
Cypress twig borer, report on (Coquillett). 1890. p. 116.....	A9.7:3
Cyprinus carpio. <i>See</i> Carp.	
Cyrtoneura cæsia, is [it] an injurious insect? (Coquillett). 1895. p. 338.....	A9.7:7
Dabney, Charles William, jr.:	
Agricultural and other colleges and national defense. 1899. p. 64.....	A10.3:65
same, n. d.....	A10.4:40
Civil service in Department of Agriculture. 1897.....	A10.4:33
Cotton plant, its history, botany, etc., introduction to report on. 1896. p. 13.....	A10.3:33
Grain rusts, letter of inquiry relative to, etc. 1894.....	A28.4:14
Scientific work of Agriculture Department. 1895. p. 63.....	A10.3:24
Southern agriculture, progress of, address on. 1896.....	A1.4:3
<i>See also</i> , as editor of proceedings, 1885, Chemists, Official Agricultural, Association of.	

	<b>Index</b>
	<b>Classification no.</b>
Dabney, John Charles. <i>See</i> , as joint author, Hicks, Gilbert Henry.	
Daily river stages .....	A29.10:
Dairy:	
Awards for U. S. at Paris Exposition. 1900. p. 734 .....	A1.10:900
Bacteriology of (Conn). 1895 .....	A10.3:25
By-products of, profitable disposal of, at factory and on farm.	
1898. p. 20 .....	A1.9:84
By-products of, utilization of (Alvord). 1897. p. 509 .....	A1.10:897
Development in U. S. (Alvord). 1899. p. 381 .....	A1.10:899
same, p. 244 .....	A4.1:899
Interests of Alabama, Georgia, Illinois, Indiana, and Ohio in	
(Perry). p. 335 .....	A4.1:885
Report on. p. 310 .....	A1.1:870
Siberian, notes (Smith). p. 530 .....	A4.1:899
Statistics of, Agriculture Department, report of—	
1871. p. 174 .....	A1.1:871
1873. p. 241 .....	A1.1:873
1874. p. 238 .....	A1.1:874
1875. p. 408 .....	A1.1:875
1885 (International). No. 21 .....	A27.9:23
1896 (Alvord) .....	A4.3:11
Succulent forage for (Williams). 1899. p. 613 .....	A1.10:899
Utensils of, care of (Pearson). 1896. p. 431 .....	A1.10:896
Weather and, note on (Abbe). 1899. p. 475 .....	A29.6:27
Work in, at agricultural experiment stations (Allen). 1897. p. 359.	A10.6:8
<i>See also</i> Creameries—Deerfoot farm centrifugal dairy.	
Dairy breeds of cattle:	
Conformation of beef cattle and (Soule). 1902 .....	A1.9:143
Report on (Alvord). p. 137 .....	A4.1:898
same (Alvord). 1899 .....	A1.9:106
Scales of points for judging. p. 185 .....	A4.1:898
same. 1899 .....	A4.4:27
<i>See also</i> Beef and dairy cattle—Cattle—Dairy herd.	
Dairy building. <i>See</i> Biological and dairy building.	
Dairy Division, Agriculture Department. For publications of this	
Division <i>see</i> Animal Industry Bureau .....	A4:
Dairy factories, statistics of. 1875. p. 217 .....	A27.9:13
Dairy farmer, value of stave silo to (Beal). 1898. p. 23 .....	A1.9:103
Dairy farming:	
Address on (Loring). 1882. p. 91 .....	A1.8:22
Report on, with some account of farm of the writer (Pratt).	
p. 456 .....	A1.1:865
Dairy herd:	
Cooperative tests (Phelps). 1901. p. 120 .....	A10.3:99
Formation and management (Alvord). 1894. p. 295 .....	A1.10:894
same. 1897 .....	A1.9:55
<i>See also</i> Cattle—Dairy breeds of cattle.	
Dairy husbandry in northern Illinois. 1874. p. 159 .....	A27.9:12
Dairy industry:	
Denmark, progress, report on (Georgeson). 1893 .....	A1.8:50
same .....	A4.3:5
Missouri and Kansas (Chubbuck). 1897 .....	A4.3:18
Nebraska, South Dakota, and North Dakota (Monrad). 1896 ..	A4.3:16
Porto Rico, with notes upon St. Thomas and Cuba (Pearson).	
p. 306 .....	A4.1:901
United States (Wing). p. 387 .....	A4.1:887-8
Dairy laws, national and State, in full, 1897 (Pearson). p. 531 ..	A4.1:897
Same (Pearson). 1900 .....	A4.3:26
Dairy officials, list of—	
1898. p. 610 .....	A1.10:898
1899. p. 688 .....	A1.10:899
1900. p. 644 .....	A1.10:900
1901. p. 623 .....	A1.10:901
Dairy products:	
Adulteration of—	
1887 .....	A7.3:13 <sup>1</sup>
1893 (Brown). p. 54 .....	A7.3:41

# Index

	Classification no.
<b>Dairy products—Continued</b>	
Analysis of, provisional methods for (Le Clerc). 1902. p. 35...	A7.3:65
See also Chemical analysis, methods of.	
Foreign markets for (Dodge). 1890. p. 626 .....	A27.9:28
Foreign trade in, threatened. 1890. p. 34 .....	A27.9:28
Inspection and marking for export, rules and regulations. Oct. 30, 1901 .....	A4.5:91
Legal and State standards for—	
1898. p. 666 .....	A1.10:898
1899. p. 752 .....	A1.10:899
1900. p. 739 .....	A1.10:900
1901. p. 695 .....	A1.10:901
Paris Exposition of 1900 (Alvord). p. 599 .....	A1.10:900
same. p. 194 .....	A4.1:900
Report of committee on, at Association of Official Agricultural Chemists—	
1887. p. 12 .....	A7.3:16
1888. p. 8 .....	A7.3:19
1889. p. 98 .....	A7.3:24
1890. p. 29 .....	A7.3:28
1891. p. 16 .....	A7.3:31
1892. p. 7 .....	A7.3:35
1893. p. 92 .....	A7.3:38
1894. p. 176 .....	A7.3:48
1895. p. 122 .....	A7.3:47
1896. p. 98 .....	A7.3:49
1897. p. 105 .....	A7.3:51
1898. p. 81 .....	A7.3:56
1899. p. 107 .....	A7.3:57
1900. p. 115 .....	A7.3:62
1901. p. 105 .....	A7.3:67
State standards for .....	A4.4:25
Statistics, 1869-89. p. 115 .....	A27.9:32
United States, export of, 1821-90 .....	A1.2:D14
See also Butter—Cheese—Cream—Filled Cheese—Foremilk—Market milk—Milk—Pasteurized cream—Renovated butter.	
Dairy rules, fifty. p. 201 .....	A4.1:898
Same, p. 36 .....	A1.9:63
Same (placard) .....	A4.2:D14
Dairy salt, study of various brands (Lawson). 1899. p. 28 .....	A1.9:107
Dairy schools (Pearson). 1896 .....	A4.3:17
Dairy tests at World's Columbian Exposition, report of committee on (Scovell). 1894. p. 52 .....	A10.3:20
<b>Dairying:</b>	
Abstracts of reports of agricultural experiment stations on. 1889-1902 .....	A10.6:
American—	
report on. p. 352 .....	A1.1:869
rise, progress, and national importance (Willard). p. 431 .....	A1.1:865
Associated, in New England (Myrick). p. 375 .....	A4.1:887-8
Ayrshire, England. 1867. p. 56 .....	A27.9:5
California—	
notes upon (Pearson). p. 266 .....	A4.1:899
same (reprinted). 1900 .....	A4.3:24
report on (Wickson). 1896 .....	A4.3:14
Cooperative, in Sweden (Salviate). 1872. p. 452 .....	A27.9:10
Condition of, in principal dairy States for season of 1885 .....	A1.8:41
Directory of departments, boards, societies, colleges, and other organizations in interest of. 1885 .....	A1.8:39
English and American, their points of difference and comparative merits (Willard). p. 358 .....	A1.1:866
Milk fermentations and their relations to. 1892 .....	A1.9:9
Officials and associations connected with, list of, in U. S. and Canada (Alvord)—	
1896 .....	A4.4:10
1897 .....	A4.4:18
1898 .....	A4.4:22



<b>Dairying—Continued</b>	
Officials and associations connected with, etc.—Continued	
1899 .....	A4.4:26
1900 .....	A4.4:29
1901 .....	A4.4:33
1902 .....	A4.4:36
Review of recent work on (Allen). 1895. pp. 943, 1043 .....	A10.6:5
Scotland (Higgins). p. 213 .....	A4.1:898
South (Tracy). 1902 .....	A1.9:151
Dairymen, American, example for .....	A12.4:4
Dairymen's Association. See American Dairymen's Association— New York Dairymen's Association.	
Daisy. See Oxeye daisy.	
<b>Dakota:</b>	
Forest-tree culture in (Smith). 1891. p. 50 .....	A13.3:5
Mammals and birds of parts of, food habits and distribution of (Bailey). p. 426 .....	A1.1:887
same. p. 426 .....	A5.1:887
Tree planting on plains of, experience in. 1891. p. 45 .....	A13.3:5
Wheat in. 1887. p. 631 .....	A27.9:25
See also Black Hills.	
Dakota basin, geological conditions of (Culver). pt. 3. p. 195 .....	A15.2:Ir7 <sup>2</sup>
<b>Dakotas, two:</b>	
Certain climatic features of (Finley). 1893 .....	A29.2:D14
Grasses and forage plants of (Williams). 1897 .....	A3.3:6
Dall, William Healey. Agricultural resources of Alaska. p. 172 .....	A1.1:868
<b>Dallas, W. L.:</b>	
Climatology of southern and western Asia. 1896. p. 672 .....	A29.3:11 <sup>3</sup>
Cyclical changes in India, preliminary discussion of. 1897. p. 532 .....	A29.6:25
Droughts in India, prediction of. 1894. p. 13 .....	A29.3:11 <sup>1</sup>
Monsoon region, Indian, upper currents of air above. 1896. p. 417 .....	A29.6:24
Daly, Reginald A. Ice drift and theory of ocean currents. 1900. p. 433 .....	A29.6:28
Dancing dervishes or dust whirls (Kimball). 1902. p. 316 .....	A29.6:30
Dancy, F. B. Fertilizers containing cotton-seed meal, report on de- termination of available phosphoric acid in. 1890. p. 161 .....	A7.3:28
Daniel, John Warwick. Roads, good, the question of the hour. 1902. p. 68 .....	A22.3:23
Daniels, Edward. Road business, a question of education. 1901. p. 66 .....	A22.3:21
Dansey's (Captain) kite for stranded vessels (Abbe). 1897. p. 206 .....	A29.6:25
Darlington, Wm. Weeds of American agriculture. p. 509 .....	A1.1:865
Darlington, Md., road league, origin and work of. 1895 .....	A22.4:17
Darmstadt, Germany, experiment station, report on (Lindsey). 1897. p. 3 .....	A10.6:7
<b>Date:</b>	
Cultivation of (Borstel). 1883. p. 25 .....	A1.8:24
Culture of (Klee). 1883 .....	A1.8:24
Date line in Pacific Ocean (Page). 1902. p. 363 .....	A29.6:30
<b>Date palm:</b>	
Climatic data bearing upon culture of (Henry). 1898. p. 160 .....	A29.6:26
Cultivation of, importance of. 1878. p. 13 .....	A1.6:4
Date palm and its culture (Swingle). 1900. p. 453 .....	A1.10:900
Date palm in U. S. 1899. p. 16 .....	A1.9:92
Date-palm scale, experiments with. 1891. p. 441 .....	A9.7:3
Daugherty, Charles M. Cotton-seed industry. 1901. p. 285 .....	A1.10:901
Daugherty, J. S. Address of, before good roads convention of Texas, Feb., 1895. p. 3 .....	A22.3:15
<b>Davenport, Eugene:</b>	
Feed, coarse, necessity of, to grow cattle. p. 202 .....	A4.1:897
Rural life, what can agricultural colleges do to nourish a hearty sentiment for? 1896. p. 82 .....	A10.3:41
Davenport, George E. Ferns collected in Mexico by Joseph Nelson Rose during months of August and September, 1897. 1899. p. 146 .....	A6.5:5
Davidson, Rachel J. Rural road naming and house numbering. 1901. p. 19 .....	A22.3:21

# Index

## Classification no.

Davidson, S. P., long record of, note on (Abbe). 1900. p. 450.....	A29.6:28
Davis, Arthur Powell. Rainfall and temperature in Nicaragua. 1898. p. 211.....	A29.6:27
Davis, Charles, short biography of (Abbe). 1901. p. 173.....	A29.6:29
Davis, G. C.: Insect borers, few, notes on. 1891. p. 64.....	A9.7:4
Insects, special economic, of season. 1894. p. 198.....	A9.7:7
Mealy bugs and their allies. 1894. p. 168.....	A9.7:7
Davis, (Miss) J. A.: Agricultural experiment stations, general statistics of. 1899. p. 501.....	A10.3:80
Land grant colleges and agricultural experiment stations in U. S., statistics of, for year ended June 30, 1899.....	A10.3:78
Davis, (Mrs.) Lavinia K. Female life in open air. p. 430.....	A1.1:866
Davis, Robert W. Address of, before Jefferson memorial and inter- state good roads convention, Apr., 1902. p. 54.....	A22.3:25
Davis, T. H. New Haven, Conn, winds and rainfall of, 1873-1900. p. 261.....	A29.6:30
Davis, William Morris. Redfield and Espy period of meteorological advancement, 1830 to 1855. 1895. p. 305.....	A29.3:11 <sup>2</sup>
Davison, George Millard. Meteorology, elementary, talk on. 1899. p. 144.....	A29.6:27
Davy, Joseph Burtt: Horticultural herbarium, making of. 1900. p. 93.....	A10.3:76
Stock ranges of northwestern California, notes on grasses, for- age plants, and range conditions. 1902.....	A19.3:12
Davy, Marié: Europe, meteorological phenomena in, Jan. and Feb., 1864. No. 2. p. 94.....	A27.9:2
Meteorology and growth of beet. 1879. p. 284.....	A1.6:28
Dawley, F. E. Farmers' institute worker, requisites of a good. 1902. p. 42.....	A10.3:110
Dawson, Charles Francis: Asthemia in fowls. p. 329.....	A4.1:898
Microorganismal diseases, laboratory methods for diagnosing of certain. p. 335.....	A4.1:898
Milk and its products, pathogenic bacteria in, vitality and reten- tion of virulence by certain. p. 224.....	A4.1:898
See also, as joint author, Moore, Veranus A. — Smith, Theobald.	
Day, Charles M. See, as joint author, Faville, George C.	
Day, P. C. Weather of the month, July, 1900.....	A29.6:28
Same, July, 1901.....	A29.6:29
Day wages. See Wages.	
Deakin, Alfred. Australian report on American irrigation, 1884-85. p. 197.....	A15.2:Ir7 <sup>1</sup>
Dean, Albert. Cattle, Southern, regulating transportation of. p. 399.....	A4.1:889-90
Dean, R. H. Climate, influence of, on animal life. 1902. p. 107..	A29.3:31
Dean, Seneca. See, for reports as Superintendent, Seed Division, Agriculture Department, 1868-1879.....	A24.1:
Death by lightning, apparent, directions for procedure in case of. 1894. p. 533.....	A1.10:894
Death Valley, Cal: Climate and meteorology of (Harrington) 1892.....	A29.3:1
Noctuidæ from, descriptions of (Smith). 1893. p. 328.....	A9.7:5
Pyralidæ from, descriptions of (Fernald). 1894. p. 255.....	A9.7:6
Death Valley expedition, 1891: Biological survey of parts of California, Nevada, Arizona, and Utah, 1891. Part 2. 1893. [Pt. 1 not published.].....	A5.5:7
Botany of (Coville). 1893.....	A6.5:4
Diptera of, list of (Williston). 1893. p. 253.....	A5.5:7
Fishes of, collected in southern California and Nevada, report on, with descriptions of new species (Gilbert). 1893. p. 229....	A5.5:7
Heteroptera of (Uhler). 1893. p. 260.....	A5.5:7
Insects, small, collection made during (Riley). 1893. p. 235...	A5.5:7
Land and fresh-water shells collected in California and Nevada by (Stearns). 1893. p. 269.....	A5.5:7

Death Valley expedition, 1891—Continued	
Localities visited by, list of (Palmer). 1893. p. 361.....	A5.5:7
Ornithology of, comprising notes on birds observed in southern California, southern Nevada, and parts of Arizona and Utah (Fisher). 1893. p. 7.....	A5.5:7
Orthoptera from (Bruner). 1893. p. 266.....	A5.5:7
Pyralidina of. 1894. p. 254.....	A9.7:6
Reptiles and batrachians collected by, annotated list of, with descriptions of new species and field notes by Merriam (Stejneger). 1893. p. 159.....	A5.5:7
Debts of farmers. 1887. p. 78.....	A27.9:25
December, weather conditions for, monthly statement of average (Garriott). 1900. p. 538.....	A29.6:28
Deciduous fruits. See Fruits.	
Decimal system of weights and measures (Johnson). 1864. No. 6. p. 20.	A27.9:2
Decker, Horace M. Kite, mechanics of, report on. 1897. p. 349..	A29.6:25
Decroix, E. Epizootic catarrh, information relative to. 1873. p. 180.	A27.9:11
Deerfield stock farm, Spencer Island, Butler County, Kans., fatal outbreak of Southern cattle fever at (Fullinwider). p. 463...	A4.1:884
Deerfoot farm centrifugal dairy (Sturtevant). p. 629.....	A1.1:880
Deerskins, exports of, from British Columbia (Smith). p. 519.....	A4.1:900
De Ghequier, A. Commercial fertilizers, sale of, uniformity in legislation with regard to, views on. 1885. p. 46.....	A7.3:7
De Hart, D. E. Address of, before national road conference, July, 1894. p. 15.....	A22.3:10
Dehérain, Pierre Paul:	
Nitrification in arable soil. 1896. pp. 353, 491.....	A10.6:6
Peronospora, milk of lime as remedy for, account of visit of, to Italian vineyards treated with. 1886. p. 77.....	A6.3:2
Plants, organic matter in, origin and formation of. 1898. p. 903.	A10.6:9
Dehorning cattle (Gowell and Russell). p. 489.....	A4.1:898
Dehydration of viscous organic liquids (Carr and Sanborn). 1895. p. 134.....	A7.3:47
De Kay, Charles. Berlin, Germany, cost of hauling farm products over wagon roads at. p. 4.....	A22.4:27
De Lafitte. See Lafitte, Prosper de.	
De Lagerheim, G.:	
Fungi, new species of, from North and South America, observations on. 1891. p. 44.....	A28.5:7
Fungus of potato scab, remarks on. 1891. p. 103.....	A28.5:7
Puccinia and Phragmidium, relationship of. 1891. p. 111.....	A28.5:6
De Lamanon, G. Atmosphere, flux and reflux of. 1898. p. 463...	A29.6:26
Delaware:	
Anthrax combating in (Neale). p. 190.....	A4.1:897
Entomological notes from (Sanderson). 1902. p. 97.....	A9.6:37
Farm resources and products of. 1868. p. 21.....	A27.9:6
Farmers' institute work accomplished in (Webb). 1902. p. 17.	A10.3:120
Insects in, notes on (Sanderson). 1900. p. 66.....	A9.6:26
Pleuro-pneumonia, contagious, outbreak of. p. 448.....	A4.1:884
Road improvement in, extract from governor's message (Tunnell). p. 3.....	A22.4:33
Sheep husbandry in (Webb). 1883. p. 172.....	A1.7:2
Delaware River See Kingsessing and Tinicum meadow.	
Del Monte, Enrique. Climatology of Havana, Cuba. 1898. p. 152.	A29.6:28
Deming, E. W. Sorghum sugar experiments at Conway Springs, Kans. p. 280.....	A1.1:888
Same, p. 63.....	A7.3:20
Demography. See Paris, tenth international congress of hygiene and demography.	
Demoussy, Emile. Grignon Agricultural Experiment Station, investigations at. 1895. p. 3.....	A10.6:5
Denby, Charles. Agriculture in China. 1893. p. 23.....	A27.9:32
Dendrolene, report on (Smith). 1895. p. 31.....	A9.6:2
Dendrotettix, genus, report of (Riley). 1893. p. 254.....	A9.7:5
Denison, Texas. Grapevine treatment for downy mildew at, with salts of copper, in 1877 (Munson). p. 23.....	A6.3:5

# Index

	Classification no.
<b>Denmark:</b>	
American boots and shoes in (Blom). 1900. p. 521.....	A4.1:899
American horse meat in (Blom). p. 505.....	A4.1:900
American horses in (Kirk). 1898. p. 53.....	A1.2:H78
Climate of (Paulsen). 1896. p. 640.....	A29.3:11 <sup>3</sup>
Dairy industry of, progress report on (Georgeson). 1893.....	A1.8:50
same.....	A4.3:5
Egg industry in. 1902. p. 608.....	A4.1:901
Hog cholera in. p. 159.....	A4.1:887-8
same, p. 168.....	A1.1:888
Trade of (Hitchcock). 1900.....	A12.3:9
Dennis, J. S. Water rights under Canada northwest irrigation act. 1901. p. 11.....	A10.3:96
Densmore (Brothers).. Sugar, evaporating apparatus for. 1887. p. 57.....	A7.3:17
Denson, Lee A. Weather forecasts, double observation as a means of improving. 1902. p. 153.....	A29.3:31
Denton, Albert A.:	
Sorghum culture at Sterling, Kans. 1891. p. 78.....	A7.3:34
Sorghum sirup, manufacture of. 1899.....	A1.9:90
same. 1901.....	A1.9:135
Sterling, Kans., sorghum sugar experiments at—	
1887. p. 57.....	A7.3:17
1892. p. 76.....	A7.3:37
Sugar, evaporating apparatus for. 1887. p. 57.....	A7.3:17
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Denton, Albert A., and Crampton, C. A.:	
Sorghum, experiments with, at Sterling Experiment Station—	
1888. p. 287.....	A1.1:888
same. p. 105.....	A7.3:20
1889. p. 82.....	A7.3:26
Dentrification. <i>See</i> Soils.	
Denver, Colorado:	
Business and resources of. 1868. p. 143.....	A27.9:6
Weather forecast district, monthly reports of, July, Sept.-Dec., 1901 (Brandenberg).....	A29.6:29
same, Jan.-Oct., 1902 (Brandenberg).....	A29.6:30
Denza, P. Francesco. Meteorology of Italian mountains. 1896. p. 659.....	A29.3:11 <sup>3</sup>
Deperaís, ——. <i>See</i> , as joint author, Comes, O.	
Derecho of May 16, 1899, in Ohio (Smith). p. 196.....	A29.6:27
Derelicts. <i>See</i> Wrecks.	
De Riemer, Alicia, and Abbe, Cleveland. Hail, average frequency of days of, during 1893-97. p. 546.....	A29.6:26
Dermestes vulpinus in goatskins (Jones). 1889. p. 63.....	A9.7:2
Dermestidæ, herbivorous habits of certain (Chittenden). 1895. p. 36.....	A9.6:2
De Roode, Rudolf J. J. Commercial fertilizers, determination of phosphoric acid and nitrogen in, in same weighed quantity of substance. 1891. p. 104.....	A7.3:31
Des Lignes sugar experiment station, Baldwin, La., experiments at, season of 1888 (Crampton).....	A7.3:22
De Schweinitz, Emil Alexander:	
Animals, diseases of, results of chemical investigations for prevention of. p. 122.....	A1.1:890
same, with additions. p. 110.....	A4.1:889-90
Bacterial products, investigation of effects of, in prevention of animal diseases. 1893. p. 138.....	A1.1:891
same, p. 66.....	A4.1:891-2
Berlin, international congress for consideration of best methods for checking or curing tuberculosis, May 24-27, 1899. p. 126.....	A4.1:899
Biochemic laboratory, investigations conducted by—	
1892. p. 119.....	A1.1:892
same, p. 105.....	A4.1:891-2
1893. p. 161.....	A1.1:893
Butter substitutes. 1895. p. 445.....	A1.10:895

De Schweinitz, Emil Alexander—Continued	
Cornstalk disease in cattle, cornstalks presumably cause of, chemical examination of. 1896. p. 88.....	A4.3:10
Disinfectants, some modern. 1896. p. 255.....	A1.10:896
Enzymes, or soluble ferments, of hog-cholera germ. p. 266.....	A4.1:898
Guinea pigs, production of immunity in, from hog cholera by use of blood serum from immunified animals. p. 269.....	A4.1:898
Iowa, hog cholera and swine-plague investigations in. Preliminary report. p. 501.....	A4.1:899
Media culture for biochemic investigations. p. 145.....	A4.1:899
Milk, examination of. p. 147.....	A4.1:899
pasteurization and sterilization of. 1894. p. 331.....	A1.10:894
Paris—	
tenth international congress of hygiene and demography, held August 10-16, 1900. p. 260.....	A4.1:900
thirteenth international medical congress, held August 4, 1900. p. 254.....	A4.1:900
Serum treatment for swine plague and hog cholera. p. 235.....	A4.1:898
same, with collaboration of Marion Dorset and E. C. Schroeder.....	A4.3:23
Sorghum-sugar experiments at Conway Springs, Kans. p. 284...	A1.1:888
same, rearranged. p. 74.....	A7.3:20
same. 1889. p. 65.....	A7.3:26
Tuberculin, preparation and use of. 1898. p. 111.....	A1.10:898
Tuberculin and its use. 1894. p. 159.....	A4.3:7
Tuberculin injections, effect of, upon milk of healthy and diseased cows. 1896. p. 15.....	A4.3:13
Tuberculosis bacillus—	
attenuated, its use in producing immunity from tuberculosis in guinea pigs. p. 318.....	A4.1:898
report on. p. 262.....	A4.1:900
some products of, and treatment of experimental tuberculosis with antitoxic serum. p. 305.....	A4.1:898
Tuberculosis and glanders, investigations concerning. p. 289....	A4.1:898
De Schweinitz, Emil Alexander, and Dorset, Marion:	
Tuberculosis bacilli—	
composition of glanders bacilli and. p. 295.....	A4.1:898
fats contained in. p. 301.....	A4.1:898
growth of, upon acid media. 1896. p. 7.....	A4.3:13
mineral constituents of. p. 302.....	A4.1:898
De Schweinitz, Emil Alexander, Emery, J. A., and Cameron, F. K.	
Tobacco powders and extracts, nicotin in, report of investigation of methods for determination of. 1898. p. 113.....	A7.3:56
De Schweinitz, Emil Alexander, and Schroeder, Ernest C.:	
Bovine tuberculosis bacillus, virulence of, for monkeys, and effect of tuberculins made from tuberculosis bacilli derived from different animals. p. 579.....	A4.1:901
Tuberculosis bacillus, attenuated, further experiments with. 1896. p. 11.....	A4.3:13
Desert flora, North American, between 32° and 42° north latitude (Parry). 1871. p. 23.....	
Desert lands, crop report of. 1889. p. 373.....	A27.9:9
Deserts and desert ranges of southern California, southern Nevada, northwestern Arizona, and southwestern Utah; cactuses, yuccas, and agave, geographic and vertical distribution of (Merriam). 1893. p. 345.....	A27.9:27
Same, trees and shrubs in, distribution of (Merriam). 1893. p. 285.....	A5.5:7
Desiccation of fruits and vegetables (Watts). 1875. p. 507.....	A5.5:7
De Soto hogs of Louisiana. 1883. No. 64. p. 16.....	A27.9:13
Destitute regions, water for (Curtiss). p. 230.....	A27.9:21
<i>See also</i> Arid regions.	
Detmer, W. Moisture, temperature, and light conditions, influence of, on process of germination. 1895. p. 405 ..	A1.1:867
Detmers, H. J.:	
Anthrax among cattle in the Northwest. 1881. p. 312.....	A29.3:11 <sup>2</sup>
	A1.6:34

# Index

	Classification no.
Detmers, H. J.—Continued	
Enzoötic cerebro-meningitis among horses in Texas. 1882. p. 363.	A1.1:881,882
Glanders and farcy. p. 445 .....	A1.1:878
same, 1879. p. 257 .....	A1.6:12
Horses, diseases among, in Illinois. 1881. p. 355.....	A1.1:881,882
Sheep, diseases of, in Texas. p. 68 .....	A1.1:883
Southern cattle fever, investigation of. p. 426 .....	A4.1:884
same. 1884. p. 247 .....	A4.2:An5
Swine-plague, investigations of—	
(1st report), 1878. p. 321 .....	A1.1:878
same, p. 19 .....	A1.6:12
(2d report). . 1879. p. 365 .....	A1.1:879
same, p. 13 .....	A1.6:22
(3d report). 1880. p. 527 .....	A1.1:880
same, p. 153 .....	A1.6:34
(4th report). 1881. p. 316 .....	A1.1:881-2
Texas cattle fever, investigation of. p. 595.....	A1.1:880
same, at Champaign, Ill. 1880. p. 291 .....	A1.6:34
Detroit, Mich., halo at, May, 1900 (Hooper). p. 202.....	A29.6:28
Deutsche Seewarte, Handbooks of, notes on (Abbe). 1897. p. 401.	A29.6:25
De Vilmorin, Henry L. Plants, cultivated, selection and its effects	
on. 1900. p. 3.....	A10.6:11
Devoe, W. S. Pleuro-pneumonia among cattle in Kansas, outbreak	
of. p. 322 .....	A4.1:895-6
De Vuyst, Paul. <i>See</i> Vuyst.	
Dewey, C. Frank. Hungarian milling, report on. 1893. p. 38 ....	A27.9:31
Dewey, Lyster Hoxie:	
Camphor tree, circular on .....	A6.4:12
Canada thistle, circular on.....	A6.4:27
Dodders infesting clover and alfalfa, circular on. 1898 .....	A6.4:14
Egyptian cotton in U. S., circular on. 1900 .....	A6.4:26
Gramineæ (grass family) of western Texas, description of. 1894.	
p. 484 .....	A6.5:2
Hemp industry in U. S. 1901. p. 541.....	A1.10:901
Migration of weeds. p. 263.....	A1.10:896
Mustard family, three new weeds of. 1897.....	A6.4:10
Nut grass, circular on. 1894.....	A6.4:2
Russian thistle—	
circular on .....	A6.4:3
history as a weed in U. S., with an account of means available	
for its eradication. 1894 .....	A6.3:15
Tumbling mustard, circular on.....	A6.4:7
Vegetation, characteristic, of desert region from western Texas	
to central Arizona. p. 351 .....	A1.1:891
same. p. 351.....	A6.1:891
Weeds, legislation against. 1896.....	A6.3:17
Weeds and how to kill them.....	A1.9:28
Weeds in cities and towns. 1898. p. 193 .....	A1.10:898
Wild garlic, circular on.....	A6.4:9
Dew-point:	
Relative humidity, etc., tables for obtaining temperature of. 1897 .	A29.2:D51
Tables of, observed at Honolulu (Lyons). 1899. p. 587 .....	A29.6:27
Temperature of, psychrometric tables for obtaining (Marvin).	
1900 .....	A29.2:P95
Value of, in forecasting weather under certain conditions (Wood).	
1902. p. 152.....	A29.3:31
<i>See also</i> Vapor pressure.	
Dexter, Edwin Grant. Conduct and the weather, report on. 1899.	
p. 353 .....	A29.6:27
Dextrine, starch, dextrose, sucrose, and gum arabic, mixture of, at-	
tempt to analyze (Krug). 1894. p. 167 .....	A7.3:43
Dextrose. <i>See</i> Dextrine.	
Diabrotica soror, dipterous parasite of (Coquillett) 1890. p. 233 ....	A9.7:2
Diabrotica 12-punctata:	
Habits and life history of (Riley). 1891. p. 104 .....	A9.7:4
Observations on (Quaintance). 1900. p. 35.....	A9.6:26
Dickinson, S. C. Steel-track roads. 1901. p. 68.....	A22.3:21



	<b>Index</b>
	<b>Classification no.</b>
Dickinson, W. L. Highways, improvement of. 1902. p. 43 .....	A22.3:25
Dickoré, William. Food examinations, suggestions for better arrangement of. 1893. p. 162 .....	A7.3:38
Dickson, William. Horse, shoeing of. p. 529 .....	A4.2:H78
Dickson, William, and Lowe, William Herbert. Surgical operations on cattle. p. 301 .....	A4.2:C29 <sup>2</sup>
Diehl, Israel S. Goat, breeding and raising of. p. 216 .....	A1.1:863
Diet. <i>See</i> Food and diet.	
Dietaries in public institutions (Atwater). 1901. p. 393 .....	A1.10:901
Dietary studies:	
Alabama negro, 1895 and 1896 (Atwater and Woods) .....	A10.3:38
Chicago, 1895, 1896, conducted with cooperation of Jane Addams and Caroline L. Hunt, of Hull House (Atwater and Bryant). 1898 .....	A10.3:55
Club of women students at North Dakota Agricultural College (Ladd). 1901. p. 21 .....	A10.3:91
Harvard and Yale boat crews (Atwater and Bryant). 1900 .....	A10.3:75
Illinois University (Grindley and Sammis). 1901. p. 7 .....	A10.3:91
Lake Erie College, Painesville, Ohio (Bevier and Sprague). 1901 p. 27 .....	A10.3:91
Maine State College, 1895 (Jordan) .....	A10.3:37
Missouri University, 1895, and data relating to bread and meat consumption in Missouri (Gibson and others). 1896 .....	A10.3:31
same, comments on (Atwater and Woods). p. 21 .....	A10.3:31
Negroes in eastern Virginia, 1897 (Frissell). p. 7 .....	A10.3:70
same (Bevier). 1899. p. 27 .....	A10.3:70
New Mexico in 1895 (Goss) .....	A10.3:40
New York City, 1895-1896 (Atwater and Woods) .....	A10.3:46
same, 1896 and 1897 (Atwater and Bryant) .....	A10.3:116
Purdue University, Lafayette, Ind. (Stone). 1896 .....	A10.3:32
same, comments on (Atwater and Woods). p. 23 .....	A10.3:32
Tennessee University, 1895 (Wait) .....	A10.3:29
same, comments on (Atwater and Woods). p. 33 .....	A10.3:29
United States, some results of (Bryant). 1898. p. 439 .....	A1.10:898
<i>See also</i> Nutrition investigations.	
Dietel, P. Uredinæ of United States, notes on some. 1891. p. 42 .....	A28.5:7
Dietrich, Th. Milk, fat in, process for estimating by gravimetric method. 1890. p. 159 .....	A7.3:24
Differential grasshopper. <i>See</i> Grasshopper.	
Diffusion:	
Application to sugar cane, and record of experiments with sorghum in 1883. (Wiley). 1884 .....	A7.3:2
Carbonatation and, experiments with, at Ottawa, Kans. (Wiley). 1885 .....	A7.3:6
Extracting saccharine matter from sugar-yielding plants by. 1869. p. 457 .....	A27.9:6
Methods and machinery for application of, to extraction of sugar from sugar cane and sorghum (Wiley). 1886 .....	A7.3:8
<i>See also</i> Sugar cane.	
Digestibility:	
American feeding stuffs (Jordan and Hall). 1900 .....	A10.3:77
Feeding stuffs, methods of determining (Kellner). 1898. p. 504 .....	A10.6:9
Potatoes and eggs (Snyder). 1897. p. 20 .....	A10.3:43
Digestion, effect of severe and prolonged muscular work on (Atwater and Sherman). 1901 .....	A10.3:98
Digestion experiments:	
American, report on (Jordan). 1896. p. 5 .....	A10.6:6
Is a digestion experiment fallacious? (Armsby). 1891. p. 89 .....	A10.5:3
Recent work abroad (Armsby). 1891. p. 132 .....	A10.5:3
Digestive organs, diseases of, of cattle (Murray). p. 15 .....	A4.2:C29 <sup>2</sup>
Same, of horses (Michner). p. 15 .....	A4.2:H78
Digger wasp, larger, report of (Riley). 1892. p. 248 .....	A9.7:4
Diked marshes. <i>See</i> Tidal lands.	
Dilution, cream raising by (Lawson). 1899. p. 28 .....	A1.9:105
Dines, W. H. Anemometers in general use, relative merits of. 1896. p. 699 .....	A29.3:11 <sup>3</sup>
Dipodomys ordii. <i>See</i> Kangaroo rats.	

# Index

	Classification no.
Dipter. <i>See</i> Typhlocyba.	
Diptera of Death Valley Expedition, list of (Williston). 1893. p. 253.	A5.5:7
Diptera. <i>See</i> Agromyzidae—Belvosia—Flies—Gnats—Mosquitos—Necrophagous diptera.	
Dipterous insects, two, injurious to cultivated flowers (Coquillett). 1895. p. 399	A9.7:7
Dipterous leaf miners, two, on garden vegetables (Coquillett). 1895. p. 381	A9.7:7
Dipterous parasite:	
Diabrotica soror (Coquillett). 1890. p. 233	A9.7:2
Melanoplus devastator, in California (Coquillett). 1892. p. 22	A9.7:5
Relation to economic entomology (Townsend). 1893. p. 201	A9.7:6
Diphtheria, preliminary investigation of, in fowls (Moore). 1895. p. 39	A4.3:8
Disease:	
Carriage of, by flies (Howard). p. 39	A9.6:30
Climate and climatic elements as curative or causative agencies of. (Wilson). 1902. p. 104	A29.3:31
Contagious. <i>See</i> Chinch bug—Insects.	
Insects as carriers and spreaders of (Howard). 1901. p. 177	A1.10:901
Losses of swine by. 1886. p. 546	A27.9:24
Spread of, country slaughter house as a factor in (Stiles). 1896. p. 155	A1.10:896
Diseases of animals:	
Australian farm pests and. 1887. p. 535	A27.9:25
Chemical investigations for prevention of, results of (De Schweinitz). p. 122	A1.1:890
same, with additions. p. 110	A4.1:889-90
Communicable, rules of Agriculture Department for suppression of (Colman). 1887	A1.8:44
Contagious—	
convention to consider subject of, held at Chicago, Nov., 1883.	A1.8:29
European countries. 1897. p. 69	A4.1:897
same. 1898. p. 428	A4.1:898
extension of, and means for their limitation (Hunt)—	
1884. p. 437	A4.1:884
p. 260	A4.2:An5
1885. p. 446	A4.1:885
foreign countries, consular reports on. p. 343	A4.1:891-2
foreign countries, reports on—	
1889. p. 479	A4.1:889
1900 (Thompson). p. 492	A4.1:900
1901. p. 590	A4.1:901
Great Britain. p. 37	A4.1:895-6
imported into United States, precautions against. 1883. p. 52.	A1.8:29
investigations—	
1877. p. 383	A1.1:877
1878. p. 321	A1.1:878
1879. p. 365	A1.1:879
1879	A1.6:12
1880. p. 387	A1.1:880
1881-1883. <i>See</i> Veterinary Division.	
1883 (Hopkins). p. 44	A1.8:29
1884-1902. <i>See</i> Animal Industry Bureau.	
laws of States and Territories for control of—	
1885. p. 471	A4.1:885
1886. p. 303	A4.1:886
1890. additional. p. 457	A4.1:889-90
1892. additional. p. 381	A4.1:891-2
1894. additional. p. 103	A4.1:893-4
1896. additional. p. 333	A4.1:895-6
1897. complete. p. 419	A4.1:897
1899. complete. p. 733	A4.1:899
1901. complete	A4.3:43
list of State officials having control of—	
1898. p. 603	A4.1:898
1899. p. 530	A4.1:899

Diseases of animals—Continued

Contagious—Continued

means of suppressing and extinguishing (Law). p. 19.....	A1.8:29
national legislation for, address on (Salmon). 1885. p. 13...	A1.8:38
New York and Brooklyn, preliminary report of inspectors in investigation of (McLean and others). 1884. p. 19.....	A1.7:6
prevention of, in America (Salmon). 1883. p. 32.....	A1.8:29
report of—	
1880 .....	A1.6:22
1881 .....	A1.6:34
1884 .....	A4.2:An5
rules of Agriculture Department for suppression of (Colman). 1887 .....	A1.8:44
Correspondence relative to prevalence of. 1879. p. 186 .....	A1.6:22
Germany, 1887. p. 47 .....	A27.9:28
Infectious—	
investigation of. 1879 .....	A1.6:12
same (Smith). 1891. p. 105 .....	A1.1:890
same, p. 93.....	A4.1:889-90
same, p. 75.....	A1.1:889
same, p. 28.....	A4.1:889-90
same (Smith), p. 117 .....	A1.1:891
same, p. 45.....	A4.1:891-2
same. 1892. p. 110 .....	A1.1:892
same, p. 96.....	A4.1:892-3
same. 1893. p. 140 .....	A1.1:893
list of State officers having control of. 1898. p. 603 .....	A4.1:898
same. 1899. p. 530 .....	A4.1:899
report on. 1893 .....	A4.3:3
rules of Agriculture Department for suppression of (Colman). 1887 .....	A1.8:44
State and Territorial laws relating to. 1901.....	A4.3:43
variability of, as illustrated by hog cholera and swine plague (Smith and Moore). 1894. p. 81 .....	A4.3:6
Investigations of (Smith). p. 119 .....	A4.1:895-6
Letters of correspondents, extracts relating to. p. 493 .....	A4.1:884
same. 1884. p. 291 .....	A4.2:An5
Knowledge concerning, some examples of development of (Sal- mon). 1899. p. 93.....	A1.10:899
same, p. 53.....	A4.1:899
Morphology, biology, and pathogenic properties of 28 Streptococci found in investigation of (Moore). 1893. p. 9 .....	A4.3:3
Parasitic, report on. 1893.....	A4.3:3
Prevention of, investigation of effects of bacterial products in (De Schweinitz). p. 138 .....	A1.1:891
same, p. 66.....	A4.1:891-2.
Relation of water supply to. 1899. p. 17 .....	A1.9:97
same (Bitting), p. 471 .....	A4.1:899
Reported, investigation of. p. 90 .....	A1.1:890
same, p. 78.....	A4.1:889-90
<i>See also</i> Animal smallpox — Anthrax — "Big head" — Black- leg — "Bottom disease" — Bovine tuberculosis — Bronchi- tis — Caseous lymph-adenitis — Cattle — Cholera — Cornstalk disease — Cryptogamic growths — Cutaneous — Diphtheria — Distemper — Ear diseases — Epizootic apthæ — Epizootic catarrh — Epizootics — Ergotism — Farm animals — Fetlock diseases — Florida "horse-leech" — Fluke diseases — Foot and mouth disease — Fowl cholera — Glanders — Heart — Hog cholera — Hog fever — Horses — Influenza in horses — Lameness of horses — Lumpy jaw — Mal de caderas — Mala- die du coit — Micro-organismal diseases — Millet disease of horses — Ovine caseous lymph-adenitis — Pleuro-pneumonia or lung plague among cattle — Poultry — Rabies — Sheep scab — Smallpox — Spanish fever of cattle — "Staggers" — Streptococci — Swine plague — Tapeworm diseases — Trichi- nosis — Tuberculosis — Tumors.	

## Index

	Classification no
Disinfectants, some modern (De Schweinitz). 1896. p. 255 .....	A1.10:896
Disinfection of kennels, pens, and yards by fire (Stiles). 1902. p. 15.	A4.3:35
Dismal Swamp region, Va., botanical survey of (Kearney). 1901. p. 321 .....	A6.5:5
Displaymen:	
Special, instructions to, cipher code of wind-signal orders, amend- ing. 1894 .....	A29.2:C49
Special instructions to. 1892 .....	A29.12:D63 <sup>1</sup>
Wind-signal, instructions to. 1896 .....	A29.12:D63 <sup>2</sup>
Dissosteira longipennis, recent outbreak of, notes on (Popenoe). 1891. p. 41 .....	A9.7:4
Distemper. <i>See</i> Horses.	
Distilled spirits, consumption of, in U. S., per capita of population— 1870-1895. p. 552 .....	A1.10:895
1896. p. 595 .....	A1.10:896
1898. p. 723 .....	A1.10:898
<i>See also</i> Liquors.	
Distilled water for drinking purposes (Beal). 1901. p. 5 .....	A1.9:124
Distilling flask, new, for use in Kjeldahl process (Patrick). 1891. p. 142 .....	A7.3:31
District of Columbia:	
Animals in, prevention of cruelty to, bill regarding. 1896.....	A1.4:4
Birds and game in, laws for protection of (Palmer). 1901 .....	A5.4:34
Milk of, Washington, not normal (Richardson). 1888. p. 24...	A7.3:19
Mushroom poisoning in, observations on (Coville) .....	A6.4:13 <sup>1</sup>
Pleuro-pneumonia among cattle in, investigation of (Rose). p. 51.	A1.1:881-2
Rabies in—	
1895 (Moore and Fish). p. 267.....	A4.1:895-6
1900 .....	A4.3:25
1900 (Salmon) .....	A4.4:30
Shade trees and insect defoliators, four species which affect trees of the capital. 1887.....	A9.3:10
Vivisection in. 1896.....	A1.4:2
<i>See also</i> Washington, D. C.	
District of Columbia Medical Society, committee on public health of, report on rabies. 1900.....	A4.3:25
Divining rod, use of, in search for water (Abbe). 1900. p. 109 ....	A29.6:28
Doberck, W. Weather forecasting in Hongkong. 1899. p. 98 ....	A29.6:27
Document and folding room, Agriculture Department, report of superintendent of:	
1890 (Longley). p. 449 .....	A1.1:890
1891 (Longley). p. 499 .....	A1.1:891
1892 (Longley). p. 509 .....	A1.1:892
1893 (Bane). p. 409 .....	A1.1:893
1894 (Bane). p. 215 .....	A1.1:894
Dodders infesting clover and alfalfa (Dewey). 1898.....	A6.4:14
Dodge, Charles Richards:	
Bast fibers, uncultivated, of U. S., including history of previous experiments with plants and fibers, and brief statements relat- ing to allied species produced commercially in the Old World. 1894 .....	A11.5:6
Fiber Investigations Office, Agriculture Department, work of, for farmer. 1897. p. 224 .....	A1.10:897
Fiber plants, useful, of world, descriptive catalogue of. 1897....	A11.5:9
Flax, hemp, ramie, and jute, with considerations upon flax and hemp culture in Europe, ramie machine trials of 1889 in Paris, and present status of fiber industries in U. S. 1892 .	A27.8:1
same, 2d ed. ....	A11.5:1
Flax culture—	
for fiber, in U. S., etc. 1892.....	A11.5:4
for seed and fiber, in Europe and America. 1898.....	A11.5:10
present status of, in U. S. 1897. p. 471 .....	A1.10:897
Flax for seed and fiber in U. S. 1895.....	A1.9:27
Glover, Townend, life and entomological work of. 1888.....	A9.3:18

Dodge, Charles Richards—Continued	
Hemp and jute, culture of, in U. S., with statements concerning practice in foreign countries, preparation of fiber for market, and remarks on machine question. 1896.....	A11.5:8
Hemp culture. 1895. p. 215.....	A1.10:895
same, in Europe. 1898 .....	A11.5:11
Leaf fibers of U. S., results of recent investigations relating to Florida sisal hemp, false sisal hemp of Florida, and other fiber-producing agaves, bowstring hemp, pineapple fiber, New Zealand flax, and bear grass. 1893 .....	A11.5:5
Ramie—	
cultivation of, in U. S., with statements concerning practice in foreign countries, cost of cultivation and percentages of yield, the machine question, and preparation of fiber for manufacture. 1895 .....	A11.5:7
culture of, in the South. 1893. p. 164.....	A10.3:16
facts regarding, recent. 1891. p. 183.....	A27.9:29
same. 1894. p. 443.....	A1.10:894
Ramie industry in America, recent facts regarding, with brief statements relating to manufacture in Europe, etc. 1893.....	A11.5:2
Sisal hemp culture in U. S. [Florida], with statements relating to industry in Yucatan and Bahama Islands, and brief considerations upon question of machinery for extracting the fiber. 1891 .....	A11.5:3
Vegetable fibers in Agriculture Department collection at Philadelphia Centennial Exhibition, 1876. p. 497.....	A1.1:879
Woods, native, descriptive catalogue of manufactures from, as shown in exhibit of Agriculture Department at World's Industrial and Cotton Exposition at New Orleans, La., 1886.....	A1.7:10
See also, for reports as special agent in charge, Fiber Investigations Office, 1890-1897 .....	A11.1:
Dodge, J. A. Poultry and egg industry, condition of. p. 305.....	A4.1:891-2
Dodge, Jacob Richards:	
Address of—	
before 26th annual meeting Patrons of Industry, Concord, N. H., Nov., 1892. p. 386.....	A27.9:30
on agricultural statistics, before 3d national agricultural congress, Atlanta, Ga., 1874. p. 260 .....	A27.9:12
Agricultural production for American consumption. 1884. No. 11. p. 41 .....	A27.9:22
same, press notice on. No. 13. p. 23.....	A27.9:22
Agricultural statistics—	
centennial album of. 1876 .....	A27.2:Ag8
same. 1889 .....	A27.2:St2
practical hints from, address before national agricultural congress, Atlanta, May 14, 1874. p. 146.....	A1.1:873
report of exhibits illustrating, at World's Industrial and Cotton Exposition, New Orleans, La., 1885.....	A1.8:40
Birds and bird laws. p. 431.....	A1.1:864
Cattle plague in Europe, 1865-66. p. 550.....	A1.1:865
Cereals, production and distribution of, in U. S. 1879 .....	A27.2:C33
Consular correspondence of Agriculture Department. p. 487.....	A1.1:864
Dairy products, foreign markets for. 1890. p. 626 .....	A27.9:28
Jaques "Cream pot" stock. p. 292 .....	A1.1:866
Madder, properties and uses, etc. p. 339.....	A1.1:865
Maize paper and maize cloth. p. 436.....	A1.1:863
Mutton sheep, why and where profitable. p. 341.....	A1.1:866
Ramie or China grass, importance of. p. 347.....	A1.1:865
Sheep, long-wool. p. 479 .....	A1.1:865
Sheep and wool—	
review of progress of American sheep husbandry. 1900 .....	A1.8:66
statistical report on, of world. p. 207 .....	A1.1:875
Texas cattle disease, statistical and historical investigations of progress and results of. 1871. p. 175 .....	A1.2:C29 <sup>2</sup>
West Virginia, resources of, etc., brief history of. p. 42.....	A1.1:863
See also, for reports as editor, Agriculture Department, 1868-1871..	A21.1:
See also, as editor, Statistical reports.....	A27.9:

# Index

	Classification no.
Dodge, Jacob Richards—Continued	
<i>See also</i> , for reports as Statistician, Agriculture Department, 1865-1877 and 1881-1892.....	A27.1:
Dodge, (Miss) L. C. Farmers' daughters, education of. p. 441 ....	A1.1:866
Dodge, Martin:	
Address of—	
before Jefferson memorial and interstate good roads conven- tion, Apr., 1902. p. 16.....	A22.3:25
before national road conference, July, 1894. p. 24.....	A22.3:10
temporary chairman, at international good roads congress, held at Buffalo, N. Y., Sept. 16-21, 1901. p. 11.....	A22.3:21
Road building in Ohio. 1895. p. 16.....	A22.3:17
Road work, object lesson, Government cooperation in. 1901. p. 409.	A1.10:901
Roads—	
good, work of Federal Government for. 1902. p. 43 .....	A22.3:23
relation of, to rural population. 1902. p. 34.....	A22.3:23
steel-track wagon. 1898. p. 291 .....	A1.10:898
<i>See also</i> , for reports as Director, Office of Road Inquiry, 1898; Director of Office of Public Road Inquiries, 1900 to 1902.....	A22.1:
Dodge, Richard E. Diurnal winds on faint gradient in north- western New Mexico. 1901. p. 299.....	A29.6:29
Dodge City, Kansas. Precipitation at, 1889-91. p. 108 .....	A29.6:20
Dog meat as food in Germany (Guenther). p. 520.....	A4.1:900
Dog tax in England and Scotland. 1867. p. 381 .....	A27.9:5
Dogs:	
Breeders of, association of—	
1898. p. 615 .....	A1.10:898
1899. p. 697 .....	A1.10:899
1900. p. 652 .....	A1.10:900
1901. p. 626 .....	A1.10:901
Muzzling of, in Germany and Great Britain (Mason). p. 521 ...	A4.1:900
Ravages of. 1870. p. 135.....	A27.9:8
Sheep killed by, 1858-63. p. 183 .....	A27.9:4
same. 1867. p. 84 .....	A27.9:5
Dogs and dog laws. p. 450.....	A1.1:863
Dogwood saw-fly, report on. 1890. p. 239.....	A9.7:2
Domestic animals. <i>See</i> Animals—Cow—Diseases of animals—Dogs— Hog—Horse—Pig.	
Domestic science, teaching, in rural districts (Breed). 1902. p. 91.	A10.3:120
Same (Jacobs). 1902. p. 96.....	A10.3:120
Dominica, W. I. Weather bureau in, note on (Abbe). 1900. p. 252.	A29.6:28
Doran, Edwin W. Insects, vernacular names of. 1898. p. 90.....	A9.6:17
Dorner, Otto. Must farmer pay for good roads? 1898 .....	A22.4:31
Dorr, S. M. Marbles of Rutland County, Vermont. p. 448 .....	A1.1:862
Dorset, Marion:	
Eggs, use of, as medium for cultivation of bacillus tuberculosis. p. 574 .....	A4.1:901
Hog cholera bacillus, variety of, which closely resembles bacillus typhosus. p. 566.....	A4.1:901
Tubercle bacilli, branched forms of, found in cultures. p. 572...	A4.1:901
Tuberculosis bacillus, new stain for. p. 326 .....	A4.1:898
<i>See also</i> , as collaborator, De Schweinitz, Emil Alexander.	
Dorsett, Palemon H. Spot disease of violet. 1900.....	A28.3:23
<i>See also</i> , as joint author, Woods, Albert Fred.	
Dorsey, Clarence Wilbur. Soil survey around Lancaster, Pa. p. 61.	A26.5:900 <sup>1</sup>
Dorsey, Clarence Wilbur, and Bonsteel, Jay Allan:	
Cecil Co., Md., soil survey of. p. 103 .....	A26.5:900 <sup>1</sup>
Connecticut Valley, soil survey in. 1900. p. 125.....	A1.8:64
Dorsey, Clarence Wilbur, and Coffey, George N. Soil survey of Montgomery Co., Ohio. p. 85.....	A26.5:900 <sup>1</sup>
Dorsey, Clarence Wilbur, and party. Soil survey of Statesville area, North Carolina. p. 273.....	A26.5:901 <sup>1</sup>
Dorsey, N. Ernest:	
Atmospheric radiation, Professor Very's memoir on, review of, 1900. p. 395 .....	A29.6:28
Selenium and its use for measurement of sunshine. 1899. p. 99.	A29.6:27
Sky light, blue, color and polarization of. 1901. p. 382 .....	A29.6:28



# Index

## Classification no.

Double-brooded codling moth, report of (Marlatt). 1894. p. 248 ..	A9.7:7
Doudna, Pearl Eugene, short biography of (Cajori). 1900. p. 202 ..	A29.6:28
Douglass, Kans., sorghum sugar experiments at (Edson). p. 278...	A1.1:888
Same. p. 94 .....	A7.3:20
Same (Wiley). p. 13.....	A7.3:20
Dowling, N. J. Address of, before national road conference, July, 1894. p. 35 .....	A22.3:10
Downton, England, College of Agriculture at, report on. 1885. p. 64.....	A1.8:36
Downy mildew. <i>See</i> Grape.	
Draft upon horses (Fulton). p. 511 .....	A4.1:898
Drainage:	
Surface, regulation of. 1884. No. 5. p. 19.....	A27.9:22
Upper Chagres River (Abbot). 1900. p. 243 .....	A29.6:28
Well waters and, lecture on (Warrington). 1892. p. 95.....	A10.3:8
<i>See also</i> Farm drainage—Underdraining.	
Drainage water, loss of soil fertility in. 1898. p. 4.....	A1.9:73
Draining, tile, results of. 1882. p. 43 .....	A27.9:20
Drake, John W. Oregon, facts concerning. p. 584.....	A1.1:869
Drake, W. E.:	
Agricultural and Mechanical College, relation of, to State. 1901. p. 183.....	A10.3:99
Mechanical work, what, shall we give to students of our agricultural colleges? 1895. p. 71 .....	A10.3:24
Draper, Daniel:	
Precipitation at New York City, 1870-91. p. 79 .....	A29.6:20
Thermometers, registering maximum and minimum, relative merits of various types of. 1896. p. 710.....	A29.3:11 <sup>3</sup>
Drasteria erechtea, report on (Slingerland). 1892. p. 87.....	A9.7:5
Drennen, W. M. Address of, before good roads convention at Birmingham, Ala. 1902. p. 30.....	A22.3:23
Dressed meat. <i>See</i> Meat.	
Dried apples:	
American, in Hamburg, 1894 (Robertson). p. 12.....	A7.3:48
same, in Cologne, 1895 (Wamer). p. 14 .....	A7.3:48
same, in Germany, 1895 (Mason). p. 15 .....	A7.3:48
same, in German Empire.....	A12.4:2
Dried fruit. <i>See</i> Fruit, dried.	
Driscoll, B. O. Grasshoppers, western, suggestions regarding. 1869. p. 145 .....	A27.9:7
Drought:	
Agriculture and (Abbe). 1895. p. 426.....	A29.6:23
Crops and (Abbe). 1895. p. 381.....	A29.6:23
Distant regions (Abbe). 1895. p. 381.....	A29.6:23
England. 1870. p. 434.....	A27.9:8
Famines and, in India (Eliot). 1895. p. 444 .....	A29.3:11 <sup>2</sup>
same (Archibald). 1900. p. 246.....	A29.6:28
Fire and, in the northwest. 1871. p. 401.....	A27.9:9
Great, of 1845 in northern Ohio (Ford). p. 293 .....	A29.6:23
Heat, and insect life (Mintfeldt). 1902. p. 97.....	A9.6:31
Historic, in U. S., notes on (Abbe). 1898. p. 262 .....	A29.6:26
Insurance against, note on (Abbe). 1898. p. 214.....	A29.6:26
Mississippi, southwest, in 1899 (Hazen). p. 151.....	A29.6:28
Mississippi Valley (Abbe). 1895. p. 337.....	A29.6:23
Prediction of, in India (Dallas). 1894. p. 13.....	A29.3:11 <sup>1</sup>
Widespread area of, notes on (Abbe). 1899. p. 257.....	A29.6:27
Drug laws. <i>See</i> Pharmacy and drug laws.	
Drugs:	
Adulteration of, extent and character of (Wedderburn). 1894...	A7.3:41
Insects injuring, at University of Kansas (Kellogg). 1894. p. 31..	A9.7:7
<i>See also</i> Opium—Potassium.	
Dry goods, imports of, comparison of, 1866-68. p. 32 .....	A27.9:6
Dryden, James. Egg production, experiments in. p. 506 .....	A4.1:898
Dubernard method for examination of butters (Sartori). 1890. p. 103 .....	A7.3:24
Dublin, Ireland, dead animals in, disposition of (Wilbour). p. 347.	A4.1:899
Du Bois, James T. Horses, cattle, etc., in Switzerland. p. 520 ....	A4.1:898

# Index

Classification no.

Du Buysson, H. Carbon bisulphide, fumigation with, for complete and rapid destruction of insects which attack herbarium specimens, furs, woolens, etc. 1893. p. 159 .....	A9.7:6
Ducks:	
Animal parasites of, check-list of (Hassall). 1896 .....	A4.4:13
Feeding, recent experiments in (Langworthy). 1899. p. 20 .....	A1.9:107
Ducks and geese, standard breeds and management of (Howard)....	A1.9:64
Dudley, P. H. Timber ties, structure, behavior, and causes of decay of, in roadbed; with experiments on adhesion of spikes. 1887. p. 31 .....	A13.3:1
Duenckel, F. W. <i>See</i> , as joint author, Hammon, William H.	
Dugès, Eugène. <i>Leonia Rileyi</i> , description of, new meloid genus near <i>Hornia</i> . 1889. p. 211 .....	A9.7:1
Duggar, John Frederick:	
Corn, cowpeas, and wheat bran for fattening pigs. p. 496.....	A4.1:898
Peanuts, cowpeas, and sweet potatoes as food for hogs. p. 501...	A4.1:898
Potato culture. 1896 .....	A1.9:35
Sweet potatoes; culture and uses. 1895 .....	A1.9:26
Duluth, Minn., temperatures at (Richardson). p. 463 .....	A29.6:27
Dumble, E. T. Artesian waters, existence of, west of ninety-seventh meridian, etc. 1890. p. 99 .....	A15.2:Ar7
Duncan, T. C. Ostrich farming in America. p. 685 .....	A1.1:888
Dunlap, Albert. Swine-plague in Iowa. 1879. p. 135 .....	A1.6:12
Dunlap, M. L. Agricultural machinery and implements. p. 416...	A1.1:863
Dunn, H. D. California, agricultural resources of. p. 581 .....	A1.1:866
Dunwoody, H. H. C.:	
Address of—	
as president of American Association of State Weather Services at third annual convention, Brooklyn, N. Y. 1894. p. 8.	A29.3:14
as president of American Association of State Weather Services at fourth annual convention, Indianapolis, Ind. 1896. p. 10.	A29.3:18
Meteorological observations, international, summary of. 1893...	A29.5:A
Nebraska, departures from normal temperature and rainfall, with crop yields in. 1896 .....	A29.2:N27
Signals, Weather Bureau. 1892. p. 35 .....	A29.3:7
State weather services, functions of. 1894. p. 9 .....	A29.3:11 <sup>1</sup>
State weather service organizations. 1895. p. 285.....	A29.3:11 <sup>2</sup>
Storm warnings and weather forecasts, monthly notes on. Oct., 1897-Apr., 1898.....	A29.6:
Weather conditions and crops—	
1891. p. 586 .....	A1.1:891
same. p. 586.....	A29.1:891 <sup>2</sup>
1892. p. 578 .....	A1.1:892
same. p. 578.....	A29.1:892
1893. p. 113 .....	A1.1:893
same. p. 113.....	A29.1:893 <sup>1</sup>
1894. p. 529 .....	A1.10:894
Weather forecasts, value of. 1894. p. 121 .....	A1.10:894
Dupont, C. H. Seed, selection of, importance of. 1873. p. 553 ...	A27.9:11
Durham, H. E. <i>See</i> , as joint author, Kanthack, A. A.	
Dust:	
Atmospheric—	
note on (Abbe). 1899. p. 63.....	A29.6:27
same, on C. S. Rafinesque on (Abbe). 1900. p. 291 .....	A29.6:28
observations on (Aitkin). 1896. p. 734 .....	A29.3:11 <sup>3</sup>
Rains of, note on (Abbe). 1899. p. 158.....	A29.6:27
Red, of March, 1901, notes on (Abbe). p. 316 .....	A29.6:29
Snow, report on (Abbe). 1895. p. 15.....	A29.6:23
Dust storm and mud shower, note on (Kimball). 1902. p. 269 ....	A29.6:30
Dust storms:	
Burma and elsewhere, notes on (Abbe). 1901. p. 175 .....	A29.6:29
Note on (Abbe). 1895. p. 57 .....	A29.6:23
Red rain and, notes on (Abbe). 1901. p. 120 .....	A29.6:29
Dust whirl and fairy dances, notes on (Abbe). 1899. p. 111 .....	A29.6:27
Dust whirls, or dancing dervishes (Kimball). 1902. p. 316 .....	A29.6:30
Dwellings, <i>Bryobia</i> infesting, notes on species of (Webster). 1902. p. 277 .....	A9.7:1

# Index

Classification no.

Dyar, Harrison Gray:	
Lepidopterous larvæ, description of certain. 1890. p. 61.....	A9.7:3
same. 1891. p. 389.....	A9.7:3
Sphingidæ and Bombycidæ taken by electric lamps at Poughkeepsie, N. Y., list of. 1891. p. 322.....	A9.7:3
Syntomeida epilais and Scepsis edwardsii, preparatory stages of. 1890. p. 360.....	A9.7:2
Dye, Franklin. Farmers' institutes and agricultural associations, relations between. 1902. p. 44.....	A10.3:110
Dyea, Alaska, agricultural work at, during season of 1901 (Nicolai). p. 312.....	A10.1 <sup>2</sup> :901
Dyer, Bernard. Rothamsted soils, results of investigations on, being lectures delivered under provisions of Lawes agricultural trust. 1902.....	A10.3:106
Dyer, Elisha. Rhode Island, road improvement in, extract from governor's message. p. 9.....	A22.4:33
Dyer, Reuben F. Swine-plague at Ottawa, Ill. 1879. p. 156.....	A1.6:12
Dyer's madder, culture of (Newton). 1866. p. 94.....	A27.9:4
[Also issued as 39th Cong., 1st sess., S. misc. doc. 72; serial no. 1239.]	
Eadie, John H.:	
Clouds, cumulus, observed at burning of Standard Oil Company's plant, July 5, 6, and 7, 1900, Bayonne, N. J. 1900. p. 433.....	A29.6:28
Tornado in Hudson County, N. J., on Aug. 24, 1901. p. 355.....	A29.6:29
Eagle, Alaska:	
Meteorological observations at (Henry). 1900. p. 390.....	A29.6:28
Trail from, to Valdez, reconnoissance of (Jones). p. 283.....	A10.1 <sup>2</sup> :901
Eagles Mere, Pa. Tornado at, June 27, 1892, report of (Ball). p. 309.....	A29.6:20
Ear diseases of cattle (Trumbower). p. 367.....	A4.2:C29 <sup>2</sup>
Earle, Franklin Sumner:	
Fig culture in Gulf States. 1897. p. 23.....	A20.3:5
Fungicides, experiments with. 1889. p. 83.....	A6.3:11
Trucking interests, development of. 1900. p. 437.....	A1.10:900
Earle, H. S. Road building, etc., facts and suggestions. 1901. p. 87.....	A22.3:21
Earth almond, or chufa, cultivation of. 1876. p. 37.....	A27.9:14
Earth and Mars, notes on (Abbe). 1900. p. 543.....	A29.6:28
Earth-magnetic instruments, on construction of (Edelmann). 1895. p. 522.....	A29.3:11 <sup>2</sup>
Earthquake-proof buildings, note on (Abbe). 1897. p. 309.....	A29.6:25
Same (Abbe). 1901. p. 507.....	A29.6:29
Earthquakes:	
At sea (Abbe). 1895. p. 380.....	A29.6:23
Carson City, Nev., 1875-98. (Friend). p. 64.....	A29.6:28
Central and South America, notes on (Abbe). 1898. p. 365.....	A29.6:26
How to observe (Abbe). 1895. p. 340.....	A29.6:23
Montana, notes on (Abbe). 1901. p. 175.....	A29.6:29
Monthly notes on, June, 1897-Apr., 1899 (Abbe).....	A29.6:
New Brunswick, notes on (Abbe). 1898. p. 266.....	A29.6:26
Report on one—	
Nov. 27, 1893 (Abbe). p. 332.....	A29.6:21
Sept. 1, 1895 (Abbe). p. 339.....	A29.6:23
Oct. 31, 1895 (Marvin). p. 374.....	A29.6:23
Earth roads. See Roads.	
Earths. See Alumina.	
Earthshine, variability of, some causes of (Kimball). 1901. p. 209.....	A29.6:29
East Asian fruits, sketch of relationship between American fruits and (Bailey). 1894. p. 437.....	A1.10:894
Eastern States:	
Agricultural courses in, principles underlying formation of. 1900. p. 65.....	A10.3:76
Arbor-day planting in.....	A13.4:5
Meadows and pastures in, formation and cultivation (Smith)....	A1.9:66
Roads and road-making materials in certain. 1894.....	A22.3:7
Easton, E. C. Climate and thought. 1902. p. 111.....	A29.3:31

# Index

	Classification no.
Eaton, Daniel C.:	
Ferns from southern Patagonia, collected by U. S. S. "Albatross" in 1887-91, list of. 1892. p. 138 .....	A6.5:1
Mosses from Fuegia and Patagonia, collected by U. S. S. "Albatross" in 1887-91, list of. 1892. p. 138.....	A6.5:1
Eatonia, two new species of, note on. p. 6.....	A3.4:27
Eberman, W. S. Cheese, national standard for. 1893. p. 60.....	A7.3:41
Eburia quadrimaculata, longevity of early stages of, notes upon (Webster). 1889. p. 339.....	A9.7:1
Echinocactus, North American species of, preliminary revision of (Coulter). 1896. p. 355.....	A6.5:3
Eckfeldt, J. W.:	
Lichens from California and Mexico, collected by Edward Palmer, from 1888 to 1892, list of. 1893. p. 291 .....	A6.5:1
Lichens from southern Patagonia, collected by U. S. S. "Albatross" in 1887-91, list of. 1892. p. 142.....	A6.5:1
Eckstein, D. Netherlands, agriculture in, in 1885. 1886. p. 83....	A27.9:24
Eclipse, total, of sun, May 28, 1900:	
Advance notes on (Abbe). p. 110.....	A29.6:28
Probable state of sky along path of (Bigelow). p. 404 .....	A29.6:26
Eclipse meteorology and allied problems (Bigelow). 1902 .....	A29.5:1
Eclipse shadow bands and correlated atmospheric phenomena, notes on (Abbe). 1900. p. 210.....	A29.6:28
Ecology. <i>See</i> Ocracoke Island.	
Economic entomology. <i>See</i> Entomology.	
Economic ornithology. <i>See</i> Ornithology.	
Economic plants, catalogue of collection of, in Agriculture Department (Saunders). 1891.....	A1.8:47
Ecuador:	
Agriculture in. 1891. p. 484 .....	A27.9:29
Meteorology in, note on (Abbe). 1900. p. 67 .....	A29.6:28
<i>See also</i> Galapagos Islands, S. A. — Playa Rica.	
Eddy, William A.:	
Kite experiments, record of some. 1898. p. 450 .....	A29.6:26
Weather prediction, experiments in. 1899. p. 96.....	A29.6:27
Edelmann, M. Th. Earth-magnetic instruments, on construction of. 1895. p. 522 .....	A29.3:11 <sup>2</sup>
Edible oils and fats, methods for analysis of, not including dairy products (Tolman). 1901 .....	A7.2:Oi5
Same (Tolman). 1902. p. 20.....	A7.3:65
Edinburgh, Scotland. International forestry exhibition at, 1884, report of (Riley). p. 167 .....	A1.1:884
Edmunds, J. M. Forests, paper on. 1869. p. 22.....	A27.9:7
Edson, Hubert:	
Calumet Plantation, sugar experiment station, Pattersonville, La., record of experiments at. 1889.....	A7.3:23
Sorghum analysis at Rio Grande, N. J. 1888. p. 20.....	A7.3:18
same, abstract. p. 250 .....	A1.1:887
same, abstract. p. 71 .....	A7.3:17
Sorghum sugar experiments at Douglass, Kans. p. 278.....	A1.1:888
same, p. 94 .....	A7.3:20
Education:	
Industrial classes (Andrew). 1864. No. 1. p. 15.....	A27.9:3
Modern, what is of most worth in, address on (Stubbs). 1901. p. 32.....	A10.3:99
Theory of higher, some recent changes in—	
1899. (Bryan). p. 87.....	A10.3:65
1899. (Silvester). p. 94.....	A10.3:65
1899. (Stubbs). p. 97 .....	A10.3:65
<i>See also</i> Agricultural education—Technical education..	
Education, Commissioner of, correspondence with, relative to good roads. 1896.....	A22.2:Ex18
Educational forces in U. S. relating to agriculture, cooperation of Department of Agriculture with (Willits). p. 65 .....	A1.1:891
Educational institutions. <i>See</i> Agricultural colleges, etc.	

Edwards, Henry:	
<i>Cryptophasa unipunctata</i> , habits and earlier stages of, in Australia, notes on. 1891. p. 384.....	A9.7:3
Lepidoptera, noises made by, notes on. 1889. p. 11.....	A9.7:2
Lepidopterous insect, beautiful exotic, birth of, in New York. 1891. p. 316.....	A9.7:3
Edwards, Samuel. Timber on prairies. p. 495.....	A1.1:862
Eells, M. Washington (State), dark day in. 1902. p. 440.....	A29.6:30
Egeriidae. See Moths.	
Egg-laying record of plum curculio (Quaintance and Smith). 1902. p. 105.....	A9.6:37
Egg parasite of <i>Vanessa antiopa</i> , oviposition of (Weed). 1900. p. 32.....	A9.6:26
Eggplant, bacterial disease of (Smith). 1896.....	A28.3:12
Eggs:	
Bristol trade in. p. 335.....	A4.1:899
California, food value of (Jaffa). p. 510.....	A4.1:898
Cost and value of, of different breeds of hens (Emery). p. 476..	A4.1:899
Denmark, industry. p. 608.....	A4.1:901
Digestibility of (Snyder). 1897. p. 20.....	A10.3:43
Enumeration of, 1880-90. p. 113.....	A27.9:32
Feeding flavor into (Emery). p. 473.....	A4.1:899
Flavor of, relation of feed to (Langworthy). 1900. p. 25.....	A1.9:122
Foreign markets for. p. 321.....	A4.1:899
Game birds, importation of, for propagation, regulations for. 1902.....	A5.4:37
Great Britain (Halstead). p. 508.....	A4.1:900
Hamburg, trade in (Ashby). p. 345.....	A4.1:899
Individual records of, nest box for keeping (Langworthy). 1900. p. 19.....	A1.9:114
Industry, condition of (Dodge). p. 305.....	A4.1:891-2
Madeira, exports of (Jones). p. 520.....	A4.1:900
Paris market for (Ashby). p. 336.....	A4.1:899
Preserving, in water glass (Beal). 1899. p. 17.....	A1.9:103
Production of—	
experiments in (Dryden). p. 506.....	A4.1:898
report on. 1899. p. 609.....	A4.1:901
Raising, for market. p. 345.....	A1.1:862
Russian exports of (Holloway). p. 512.....	A4.1:900
Sales of, in Paris, 1896 (Scelle). p. 339.....	A4.1:899
Selling, by weight (Langworthy). 1900. p. 24.....	A1.9:122
Spain. p. 609.....	A4.1:901
Trial shipments of, to England (Alvord). p. 321.....	A4.1:899
Use of, as medium for cultivation of bacillus tuberculosis (Dorset). p. 574.....	A4.1:901
Weights of, of different breeds of chickens (Emery). p. 474.....	A4.1:899
Eggs and their uses as food (Langworthy).....	A1.9:128
Egleston, Nathaniel H.:	
Arbor day; its history and observance. 1896.....	A1.8:56
Forest experiment stations in connection with agricultural colleges. 1885. p. 153.....	A1.7:9
Forestry, report on, v. 4. 1884.....	A13.5:4
Railroads, connection of, with forest fires. p. 128.....	A13.3:1
Timber lands, Government, value and management of. 1884. p. 11.....	A1.7:5
Timber or forests, preservation of, on public domain, legislation for. 1888. p. 212.....	A13.3:2
See also, for reports as Chief, Forestry Division, Agriculture Department, 1883-85.....	A13.1:
Egypt:	
Agriculture in, note on. 1888. p. 359.....	A27.9:26
Crops in, 1888, note on. 1889. p. 267.....	A27.9:27
Seeds and plants collected in, by Barbour Lathrop and David G. Fairchild. 1900.....	A6.6:6
Egyptian cotton:	
Culture of (Foaden). 1897.....	A10.3:42
Exports of. 1897.....	A12.4:15
same (Hitchcock). 1897. p. 29.....	A10.3:42

# Index

	Classification no.
<b>Egyptian cotton—Continued</b>	
Letter on (Atkinson). 1866. p. 417 .....	A27.9:4
Note on. 1867. p. 287 .....	A27.9:5
Report of, in U. S. (Dewey). 1900 .....	A6.4:26
<b>Egyptian strongyle (Strongylus subtile), which may possibly occur in returning American troops (Stiles). 1902. p. 41 .....</b>	<b>A4.3:35</b>
<b>Eimeria stiedæ, correct name for hepatic coccidia of rabbits (Stiles). p. 18 .....</b>	<b>A4.3:35</b>
<b>Eimeriella, new genus of coccidia (Stiles). 1902. p. 18 .....</b>	<b>A4.3:35</b>
<b>Eisen, Gustav:</b>	
Blastophaga pænes, first introduction of, into California. 1891. p. 128 .....	A9.7:4
Fig, its history, culture, and curing, with descriptive catalogue of known varieties. 1901 .....	A20.3:9
Figs, edible, their culture and curing. 1897. p. 5 .....	A20.3:5
Raisin grape, cultivation of, by irrigation. 1891. p. 225 .....	A15.2:P94 <sup>1</sup>
Elasmus, habits of (Howard). 1892. p. 253 .....	A9.7:4
Elderberry, leaf-tyer of (Chittenden). 1898. p. 82 .....	A9.6:18
<b>Eldridge, Maurice Owen:</b>	
Earth roads. 1902 .....	A1.9:136
Good roads for farmers .....	A1.9:95
Highways of Europe and America. 1902. p. 19 .....	A22.3:23
Road building, progress of, in U. S. 1899. p. 367 .....	A1.10:899
Road improvement, legislation for. 1901. p. 679 .....	A1.10:901
Roads, good country, construction of. 1898. p. 317 .....	A1.10:898
Electric engineering in Utah, development of (Jensen). 1898. p. 91 .....	A10.3:49
Electric phenomena in Euphrates Valley, notes on (Abbe). 1900. p. 290 .....	A29.6:28
Same (Huntington). 1900. p. 486 .....	A29.6:28
Electric signal apparatus, Weather Bureau station, Atlantic City, N. J. (Brand). 1898. p. 405 .....	A29.6:26
Electric street railways and macadam roads, relation between (North). 1902. p. 59 .....	A22.3:22
Electric waves in atmosphere, notes on (Abbe). 1897. p. 352 .....	A29.6:25
Electrical Congress, International, 1899, at Como, Italy, notes on (Abbe). p. 419 .....	A29.6:27
Electrical districts, notes on (Abbe). 1897. p. 249 .....	A29.6:25
Same (Abbe). 1898. p. 562 .....	A29.6:26
Electrical energy, climate as controlling factor in long-distance transmission of (McAdie). 1897. p. 439 .....	A29.6:25
Electrical engineering laboratory in its relations to local engineering work (Cory). 1900. p. 99 .....	A10.3:76
Electrical methods of soil testing. <i>See</i> Soils.	
Electrical recording instruments, storage battery for, use of (Vose). 1899. p. 300 .....	A29.6:27
<b>Electricity:</b>	
Local, in windstorm in Wyoming (Hunton). 1894. p. 509 .....	A29.6:22
Static, in Weather Bureau work, importance of (Beals). 1896. p. 39 .....	A29.3:18
<i>See also</i> Atmospheric electricity — Roentgen rays — and headings beginning Electrical.	
Electrodynamic radiations from sun, endeavor to discover (Trowbridge). 1896. p. 409 .....	A29.6:24
<i>See also</i> Atmospheric radiation.	
Electrolytes, aqueous solutions of certain, in equilibrium with atmospheric air, solubility of calcium carbonate in (Cameron and Seidell). 1901. p. 58 .....	A26.3:18
Same, solubility of gypsum in (Cameron and Seidell). 1901. p. 46 .....	A26.3:18
Eleventh Census. <i>See</i> Census.	
Eliot, John. Droughts and famines in India. 1895. p. 444 .....	A29.3:11 <sup>2</sup>
Ellenberger, Cyrus, short biography of (Abbe). 1900. p. 154 .....	A29.6:28
Elliot, D. G. Game birds of U. S. p. 356 .....	A1.1:864
Elliott, Charles Gleason. Farm drainage .....	A1.9:40
<b>Elliott, F. R.:</b>	
Apple, pear, and grape, popular varieties of. p. 119 .....	A1.1:863



Elliott, F. R.—Continued	
Fruits, hardy, popular varieties of—	
1864. p. 141 .....	A1.1:864
1865. p. 186 .....	A1.1:865
1866. p. 131 .....	A1.1:866
1867. p. 129 .....	A1.1:867
1875. p. 368 .....	A1.1:875
Elliott, Sterling. Address of, before National Road Conference, July.	
1894. p. 61 .....	A22.3:10
Elliott's "Sketch of Botany of South Carolina and Georgia," notes on grasses in (Scribner). 1901 .....	A3.4:29
Ellis, Alston:	
Agricultural colleges, work of, some general considerations re- garding. 1899. p. 15 .....	A10.3:65
Bachelor of science course, four-year, what studies should be embraced in? 1896. p. 47 .....	A10.3:30
Ellis, G. H. Wood seasoning, experiments in. 1889. p. 57 .....	A13.3:3
Ellis, J. B.:	
Fungi, some new species of, descriptions of. 1891. p. 274 .....	A28.5:7
Genus Scleroderma in Saccardo's Sylloge. 1889. p. 23 .....	A28.5:5
Triblidium rufulum, report on (Ellis). 1889. p. 29 .....	A28.5:5
Ellis, J. B., and Everhart, Benjamin M.:	
Fungi, new species of. 1891. p. 130 .....	A28.5:7
Hymenomycetous fungi, some new species of. 1889. pp. 24, 68.	A28.5:5
Mucronoporus Andersoni, report on. 1891. p. 79 .....	A28.5:6
Mucronoporus E. and E., report on. 1889. p. 90 .....	A28.5:5
North American fungi, new and rare species of. 1889. p. 145 ..	A28.5:5
Nummularia and hypoxylon, synopsis of North American spe- cies of. 1889. p. 19 .....	A28.5:5
Uredineæ and ustilagineæ, new species of. 1891. p. 118 .....	A28.5:6
Ellis, J. B., and Galloway, Beverly Thomas:	
Fungi—	
new species of. 1891. p. 31 .....	A28.5:6
new western. 1889. p. 65 .....	A28.5:5
Mucronoporus, new, report on. 1889. p. 141 .....	A28.5:5
Ellis, J. B., and Halsted, Byron David. Fungi, new, report on.	
1891. p. 33 .....	A28.5:6
Ellis, J. B., and Kellerman, W. A. Kansas fungi, new species of.	
1889. p. 142 .....	A28.5:5
Ellis, J. B., and Langlois, A. B. Louisiana fungi, new species of.	
1891. p. 35 .....	A28.5:6
Ellis, J. B., and Tracy, Samuel Mills:	
Fungi, few new, report on. 1891. p. 76 .....	A28.5:6
Uredineæ, new species of. 1891. p. 43 .....	A28.5:7
Ellsworth, Henry L., 1790–1858, short biography of. p. 267 .....	A27:9.9
Ellsworth, Luther T. Venezuelan cattle, shipments of, to Cuba. p. 516.	A4.1:899
Ellzey, M. G. Sheep husbandry south, paper on. 1883. p. 173...	A1.7:2
Elm insect, newly imported (Howard). 1889. p. 34 .....	A9.7:2
Elm leaf-beetle:	
Albany, N. Y. (Lintner). 1895. p. 50 .....	A9.6:2
Futility of trunk and crown washing against (Howard). 1896. p. 36 .....	A9.6:6
Imported—	
circular relative to (Marlatt). 1895 .....	A9.5:8
habits and natural history and means of counteracting its injuries .....	A9.3:6
Washington, D. C. (Marlatt). 1895. p. 47 .....	A9.6:2
Elmer, A. D., jr.:	
Cloudbursts. 1902. p. 478 .....	A29.6:30
Meteorological extremes at Northfield, Mass. p. 251 .....	A29.6:26
El Paso County. See Rio Grande region, Tex.	
El Paso Del Norte, Mexico. Grape culture and wine making in (Pierson). 1873. p. 24 .....	
Elster, J., and Geitel, H. Atmospheric electricity, review of recent investigations into subject of. 1895. p. 510 .....	
Emery, E. H. Tornadoes at Cherry Hill, N. J., and Woodhaven, Long Island, N. Y., report of. 1895. p. 252 .....	

# Index

	Classification no.
Emery, F. E.:	
Agricultural colleges, manual labor in. 1891. p. 106 .....	A10.3:7
Eggs—	
cost and value of, of different breeds of hens. p. 476.....	A4.1:899
feeding flavor into. p. 473 .....	A4.1:899
weights of, of different breeds of chickens. p. 474.....	A4.1:899
Emery, H. D. Hogs and pork packing in West. p. 198 .....	A1.1:863
Emery, J. A. See, as joint author, De Schweinitz, Emil Alexander.	
Emery, S. C.:	
Meteorological records for reference and study, preserving, best means of. 1902. p. 175 .....	A29.3:31
Mississippi tornado. 1902. p. 265 .....	A29.6:30
Tornadoes in Tennessee, Mississippi, and Arkansas. 1900. p. 499.	A29.6:28
Emigrants, Florida as home for (Rollins). 1872. p. 495.....	A27.9:10
Emigration:	
English statistics. 1875. p. 112.....	A27.9:14
Northern, to South, 1865. No. 6. p. 12 .....	A27.9:3
Emmer, a grain for semiarid regions (Carleton). 1901 .....	A1.9:139
Emory fumigator, new method for handling hydrocyanic acid gas in orchards (Johnson). 1899. p. 43 .....	A9.6:20
Employment agencies, free, for use of farmers, list of (West) .....	A27.4:13
Emulsion. See Kerosene emulsion.	
Encyrtid:	
New and remarkable, is it parasitic? (Howard). 1890. p. 145 ..	A9.7:3
Six-branched antennæ, report on (Ashmead). 1891. p. 455 ....	A9.7:3
Energy:	
Available, of food and body material (Atwater). 1901. p. 112..	A10.3:99
Conservation of, in human body, experiments on (Atwater and Rosa). 1899 .....	A10.3:63
Metabolism of, value of experiments on (Langworthy). 1898. p. 1003.....	A10.6:9
See also Metabolism.	
Engineer. See Agricultural Engineer.	
Engineering courses. Some objections to early differentiation of (Nagle). 1900. p. 106 .....	A10.3:76
Engineering degree courses, four-year, what shall be the character of preparatory work required to enter? (Waller.) 1899. p. 75.	A10.3:65
Engineering experiment stations, report of committee on, before convention of Association of American Agricultural Colleges and Experiment Stations—	
1896 (Aldrich). p. 116 .....	A10.3:41
1898 (Murkland). p. 32 .....	A10.3:65
1900 (Murkland). p. 40 .....	A10.3:99
Engineering work, local, electric engineering laboratory in its relations to (Cory). 1900. p. 99 .....	A10.3:76
England:	
Agricultural holdings act of 1875. p. 452.....	A27.9:13
Agricultural population of, changes in. 1875. p. 240 .....	A27.9:13
Agricultural schools in, organization and management of (Welch). 1885 .....	A1.8:36
Breadstuff, imports of, Jan. and Feb. 1870 and 1871. p. 143.....	A27.9:9
Cereal crops of, 1868. p. 148 .....	A27.9:7
Cheese in, market for (Ashby). p. 214 .....	A4.1:899
Crops and prices, 1861-65. p. 210 .....	A27.9:4
same, 1870. p. 361 .....	A27.9:8
Dairying of America and, their points of difference and comparative merits (Willard). p. 358 .....	A1.1:866
Dog tax in. 1867. p. 381.....	A27.9:5
Drought in. 1870. p. 434 .....	A27.9:8
Eggs to, trial shipments of. (Alvord). p. 321 .....	A4.1:899
Emigration statistics. 1875. p. 112 .....	A27.9:14
Farm management in. 1871. p. 474 .....	A27.9:9
Food of. 1866. p. 434 .....	A27.9:4
Grain measures of. 1863. No. 5, p. 9; No. 6, p. 22.....	A27.9:1
same, No. 1, p. 35 .....	A27.9:2
Hop growing in. 1870. p. 486.....	A27.9:8
Horse breeding in. 1875. p. 513.....	A27.9:13

<b>England—Continued</b>	
Horses in, American thoroughbred (Wray). p. 503 .....	A4.1:899
Lands in, reclamation of, reports of State geologist of New Jersey, 1869 and 1870. p. 221 .....	A1.7:7
Live-stock shipments from Canada, Argentina, and Australia to. p. 77 .....	A4.1:895-6
same, except Canada (Wray). p. 81 .....	A4.1:895-6
Manchester district of, as market for American products .....	A12.4:8
Markets of, note on. 1866. p. 18 .....	A27.9:4
Meteorological literature of, 1337-1699 (Symons). 1895. p. 338. ....	A29.3:11
Peaches and other fruits in. 1895 .....	A12.4:1
Railway ties in, treatment of (Tratman). 1889. p. 49 .....	A13.3:3
Rain in, fall of, 1841-63. No. 1. p. 42 .....	A27.9:2
Sheep of, prices of. 1867. p. 339 .....	A27.9:5
same. 1868. p. 408 .....	A27.9:6
Short-horn cattle in, sale of. 1868. p. 408 .....	A27.9:6
same. 1869. p. 305* .....	A27.9:7
Steam-plowing in. 1873. p. 364 .....	A27.9:11
Sugar beet in. 1870. p. 484 .....	A27.9:8
Weather telegraphy in (Abbe). 1897. p. 205 .....	A29.6:25
<b>Wheat—</b>	
culture in, 1870. p. 286 .....	A27.9:8
same, 1885. No. 23 .....	A27.9:23
exportation to, 1867-68. p. 325 .....	A27.9:6
imports of, 1854-63. No. 2, p. 25 .....	A27.9:2
prices of. 1895. p. 193 .....	A27.9:33
Wool trade of. 1882. No. 56, p. 31 .....	A27.9:21
<i>See also</i> Ayrshire — Cirencester — Downton — Great Britain — Kew — Leeds — Liverpool — Manchester — Rothamsted Experimental Station — Sheffield.	
Engle, H. M. Nut culture, report on. p. 37 .....	A20.1:894
Same, reprinted 1896 .....	A20.4:1
English farms and farmers, notes on (Hill). 1898. p. 583 .....	A1.10:898
<b>English sparrow (<i>Passer domesticus</i>):</b>	
Circular on. 1886 .....	A5.4:2
Circular to postmasters in relation to. 1886 .....	A5.4:7
Insectivorous habits of (Riley). p. 111 .....	A5.3:1
North America, especially in its relation to agriculture (Barrows). 1889 .....	A5.3:1
Note on. 1869. p. 300 .....	A27.9:7
Schedule on, acknowledgment of receipt of .....	A5.4:6
<i>See also</i> Sparrows.	
English walnuts, culture of (Heath). 1892. p. 133 .....	A1.8:20
Ensign, Edgar T. Forest conditions of Rocky Mountains, especially in Colorado, Idaho, Montana, Wyoming, and New Mexico. p. 41 .....	A13.3:2
Ensilage in Great Britain. 1885. No. 24. p. 34 .....	A27.9:23
<i>See also</i> Silage — Silos and silage.	
Ensilaging potatoes, desirability of. 1898. p. 21 .....	A1.9:79
<b>Entilia sinuata:</b>	
Habits of (Howard). p. 75 .....	A9.6:30
Notes on (Rice). 1893. p. 243 .....	A9.7:5
<b>Entero-hepatitis, infectious:</b>	
Caused by protozoa, in turkeys (Smith). 1895. p. 7 .....	A4.3:8
Direct transmission of, in turkeys (Moore). 1895 .....	A4.4:5
Entomologic service, voluntary, in New York State (Felt). 1899. p. 39 .....	A9.6:20
Entomological Club, American Association for Advancement of Science, Rochester meeting of, 1892, abstract of proceedings. 1892. p. 132 .....	A9.7:5
Entomological Commission, Agriculture Department: .....	A8.
Comments on fifth report of (Hamilton). 1891. p. 129 .....	A9.7:4
Entomological discoveries and observations in West Virginia in 1894 (Hopkins). p. 145 .....	A9.7:7
Entomological ethics, report on (Cockerell). 1898. p. 87 .....	A9.6:17
Entomological exhibition, 1865. <i>See</i> Paris.	

\* By a misprint, this page number appears twice.

# index

	Classification no.
Entomological notes:	
Interesting (Townsend). 1891. p. 26 .....	A9.7:4
Miscellaneous (Johnson). 1899. p. 62 .....	A9.6:20
Problems and (Smith). 1895. p. 6 .....	A9.6:2
<i>See also</i> Murtfeldt, Mary E.	
Entomological record, monthly:	
1871. p. 332 .....	A27.9:9
Oct.-Dec., 1871. (Glover) .....	A27.9:9
Jan., 1872 .....	A27.9:10
Feb., 1872-Oct., 1875. (Glover) .....	A27.9:
Entomological work:	
Agricultural experiment stations (Cook). 1891. p. 212.....	A9.7:3
same (Osborn). 1895. p. 85 .....	A10.3:24
Central Park, New York City (Southwick). 1891. p. 59 .....	A9.7:4
Economic, in parks of New York City (Southwick). 1894. p. 135.	A9.7:7
Mississippi (Weed). 1891. p. 34.....	A9.7:4
Oregon and California; notes on Australian importations (Koebele).	
1893. p. 33.....	A9.3:32
<i>See also</i> Entomological notes.	
Entomologists, Economic, Association of:	
Objects of (Gillette). 1900. p. 5.....	A9.6:26
Proceedings of—	
1st annual meeting of, 1889. p. 177 .....	A9.7:2
2d, 1890. p. 180.....	A9.7:3
3d, 1891. p. 4.....	A9.7:4
4th, 1892. p. 67 .....	A9.7:5
5th, 1893. p. 61 .....	A9.7:6
6th, 1894. p. 55 .....	A9.7:7
7th, 1895 .....	A9.6:2
8th, 1896 .....	A9.6:6
9th, 1897 .....	A9.6:9
10th, 1898 .....	A9.6:17
11th, 1899 .....	A9.6:20
12th, 1900 .....	A9.6:26
13th, 1901 .....	A9.6:31
14th, 1902 .....	A9.6:37
Entomologists:	
Government and State, and other contributors to literature of	
American economic entomology, more important writings	
of; A-K.....	A9.2:B47 <sup>2</sup>
same, L-Z.....	A9.2:B47 <sup>3</sup>
same, June 30, 1888-Dec. 30, 1896 (Banks) .....	A9.2:B47 <sup>6</sup>
same, Dec. 31, 1896-Jan. 1, 1900 (Banks).....	A9.2:B47 <sup>7</sup>
Illustrations for (Garman). 1893. p. 109.....	A9.7:6
Note and record keeping for (Hopkins). 1893. p. 103.....	A9.7:6
Official, meeting of, circular calling attention to. 1889 .....	A10.4:14
Slip records for, note on (Cockerell). 1893. p. 198 .....	A9.7:6
Station, committee on cooperation among, report of. 1894. p. 112.	A9.7:7
Work of, in experiment stations (Cook). 1891. p. 212.....	A9.7:3
same (Osborn). 1895. p. 85.....	A10.3:24
<i>See also</i> Entomological work.	
Entomology:	
Abstracts of reports of agricultural experiment stations on,	
1889-1902 .....	A10.6:
American economic, bibliography of more important contribu-	
tions to.....	A9.2:B47
Applied—	
general truths in (Riley). p. 323.....	A1.1:884
outlook of, address on (Riley). 1891. p. 181.....	A9.7:3
parasitic and predaceous insects in (Riley). 1893. p. 130....	A9.7:6
present and future of, in America (Webster). 1897. p. 5....	A9.6:9
Economic—	
accessions, catalogue of, simple form of (Ball). 1902. p. 37..	A9.6:31
bibliography of writings of Alpheus Spring Packard on (Hen-	
shaw). 1887 .....	A9.3:16
catalogue of exhibit at World's Columbian Exposition, Chica-	
go, 1893 .....	A9.3:31

	<b>Index</b>
	<b>Classification no.</b>
Entomology—Continued	
Economic—Continued	
catalogue of exhibit of, at World's Industrial and Cotton Cen-	
tenennial Exposition at New Orleans, 1884-85.....	A9.2:N42
dipterous parasites in their relation to (Townsend). 1893. p. 201	A9.7:6
duty of (Osborn). 1898. p. 6.....	A9.6:17
evolution of (Fernald). 1896. p. 5.....	A9.6:6
Florida, report on (Gossard). 1901. p. 178.....	A10.3:99
laboratory method of experimentation in (Woodworth). 1891.	
p. 266 .....	A9.7:3
progress in, in U. S (Howard). 1899. p. 135.....	A1.10:899
report of committee of Association of American Agricultural	
Colleges and Experiment Stations on progress in. 1891.	
p. 29 .....	A10.5:3
work in, at University of Kansas for season of 1894 (Snow).	
p. 140 .....	A9.7:7
Matters of international concern in, some recent (Riley). 1888.	
p. 126 .....	A9.7:1
North American, list of works on (Banks). 1900.....	A9.6:24
Office and laboratory organization (Forbes). 1889. p. 185.....	A9.7:2
Official economic, brief account of rise and present condition of	
(Howard). 1894. p. 55 .....	A9.7:7
Practical, for farmers' sons. p. 305.....	A1.1:868
Relations to vegetable production of soil, with reference to both	
destructive and beneficial insects (Rathvon). p. 372.....	A1.1:862
Suggestions and notes on, presented to entomology section of	
Association of American Agricultural Colleges and Experi-	
ment Stations, at 15th annual convention, 1901 (Slingerland).	
1902. p. 120.....	A10.3:115
Southern States, report on (Garman). 1901. p. 153.....	A10.3:99
Teaching, report on (Cook). 1890. p. 107.....	A9.7:3
<i>See also</i> Insects—names of States—headings beginning "Ento-	
mological," "Entomologist," and "Entomology."	
Entomology Division, Agriculture Department:	A9.
Pacific coast work of (Henry). 1889. p. 141 .....	A9.7:2
Practical work of, observations, etc .....	A9.3:
Some miscellaneous results of work of—	
[No. 1.] 1897.....	A9.6:7
[No. 2.] 1898.....	A9.6:10
No. 3. 1898.....	A9.6:18
No. 4. 1900.....	A9.6:22
No. 5. 1901.....	A9.6:30
No. 6. 1902.....	A9.6:38
Work of, for farmer (Howard). 1897. p. 84.....	A1.10:897
Entomology section, Association of American Agricultural Colleges	
and Experiment Stations, report of:	
1890. p. 144 .....	A10.5:3
1891. p. 78.....	A10.3:7
1892. p. 41.....	A10.3:16
1894. p. 85.....	A10.3:24
1895. pp. 17, 95 .....	A10.3:30
1896. p. 107.....	A10.3:41
1897. pp. 16, 90 .....	A10.3:49
1898. pp. 24, 133 .....	A10.3:65
1899. pp. 44, 96 .....	A10.3:76
1900. pp. 17, 153 .....	A10.3:99
1901. pp. 21, 117 .....	A10.3:115
Environment, influence of:	
Chemical composition of plants (Wiley). 1901. p. 299.....	A1.10:901
Plant varieties (Webber). 1896. p. 89.....	A1.1:896
Enzootic cerebro-spinal meningitis. <i>See</i> Horses.	
Enzymes, or soluble ferments, of hog cholera germ (De Schweinitz).	
p. 266 .....	A4.1:898
<i>See also</i> Catalase.	
Enzymic ferments upon starches of different kinds, action of (Stone).	
1896 .....	A10.3:34
Ephestia interpunctella, Zeller, notes upon (Patton). 1890. p. 158.	A9.7:3

# Index

	Classification no.
Epidemics, how do rains and winds spread? (Abbe). 1895. p. 295.	A29.6:23
Epizootic aphthæ of stock, nature, causes, treatment, etc. p. 352	A1.1:870
Epizootic catarrh, information relative to (Decroix). 1873. p. 180.	A27.9:11
Epizootics among swine (Watts). 1872. p. 214	A27.9:10
See also Ergotism.	
Equinoctial storm Sept., 1863. No. 4. p. 36	A27.9:1
Equinoctial storms, notes on (Abbe). 1900. p. 558	A29.6:28
Same (Kimball). 1901. p. 508	A29.6:29
Eragrostis obtusiflora, leaf structure of (Ogden). p. 12	A3.3:8
Erdman, Charles W. Silesian wool. p. 521	A4.1:899
Ergot, prevalence of, in 1889 (Smith). 1889. p. 203	A28.5.5
Ergotism:	
Among cattle in Kansas (Trumbower). p. 310	A4.1:884
same (Trumbower). 1884. p. 89	A4.2:An5
same (Bird). p. 317	A4.1:895-6
Enzootics of, investigation of. 1884. p. 212	A1.1:884
same, p. 175	A4.1:884
Erie, Lake:	
Influence of wind and rhythmic gusts on level of (Abbe). 1900. p. 112	A29.6:28
Oscillation, period of, note on (Harris). 1902. p. 312	A29.6:30
Wind velocity and fluctuations of water level on (Henry)	A29.5:J
Erni, Henri:	
Grape disease in Europe, origin, history, phenomena, and cure. p. 324	A1.1:865
Sorghum, analysis of. 1866. p. 336	A27.9:4
See also, for reports as Chemist, Chemistry Bureau, Agriculture Department, 1863-65	A7.1:
Erosion due to heavy rains and steep grades, notes on (Abbe). 1900. p. 544	A29.6:28
Erwin, Tenn., cloud-burst at (Worth). 1898. p. 244	A29.6:28
Erysiphæ:	
Of Montana, preliminary list of (Anderson). 1889. p. 188	A28.5:5
Upon phytoptus distortions (Anderson and Kelsey). 1889. p. 209	A28.5:5
Eschenhagen, M. Magnetic instruments, some improvements in. 1895. p. 539	A29.3:11 <sup>2</sup>
Esparto grass:	
Habits, nature, and uses. p. 260	A1.1:868
Information on (McChesney). 1869. p. 233	A27.9:7
Espy, James P., and Franklin Kite Club (Abbe). 1896. p. 334	A29.6:24
Espy, James P., and Redfield period, 1830 to 1855, of meteorological advancement (Davis). 1895. p. 305	A29.3:11 <sup>2</sup>
Estabrook, John D. Address of, before Minnesota good roads convention, Jan., 1894. p. 12	A22.3:2
Estes, John M. Tobacco; instructions for its cultivation and curing.	A1.9:6
Ether and atmosphere, note on (Abbe). 1899. p. 362	A29.6:27
Ether extract, determination of, experiments in (Anderson). 1890. p. 93	A7.3:28
Ethics, entomological report on (Cockerell). 1898. p. 87	A9.6:17
Eucalyptus:	
Cultivated in U. S. (McClatchie). 1902	A13.3:35
Growth of, in U. S. (Kinney). 1895. p. 23	A13.3:11
Eucalyptus globulus:	
Description of. 1873. p. 244	A27.9:11
From a botanic, economic, and medical point of view, embracing its introduction, culture, and uses (Planchon). 1875	A1.8:9
Use of. 1873. p. 583	A27.9:11
Eumæus atala, notes on (Schwarz). 1888. p. 37	A9.7:1
Euphrates Valley, electric phenomena in (Huntington). 1900. p. 286	A29.6:28
Same (Abbe). 1900. p. 290	A29.6:28
Europe:	
Agricultural education in (McChesney). p. 127	A1.1:868
Agricultural educational institutions of, some features of (True). 1897. p. 7	A10.4:32
Agricultural experiment stations in (Atwater). p. 517	A1.1:875
same. pt. 2. p. 466	A27.9:14



**Index**  
Classification no.

Europe—Continued

Agricultural statistics. p. 577.....	A1.1:877
Agriculture in. 1873. p. 557.....	A27.9:11
Agriculture of, American competition with. 1883. No. 64. p. 31.	A27.9:21
American plows in. 1868. p. 286.....	A27.9:6
Animals in, contagious diseases among. 1897. p. 69 .....	A4.1:897
same. 1898. p. 428 .....	A4.1:898
Beet sugar in (Gennert). p. 158.....	A1.1:868
Beet-sugar manufacture in, progress of. p. 334.....	A1.1:869
Cattle in—	
diseases of. 1870. p. 435.....	A27.9:8
foot-and-mouth disease of. 1869. p. 385* .....	A27.9:7
Cattle markets and abattoirs in (Alvord). p. 279.....	A4.1:901
Cattle plague, in 1865-66 (Dodge). p. 550.....	A1.1:865
same. 1870. p. 155 .....	A27.9:8
Cereals in, consumption of. 1885. No. 16 .....	A27.9:23
Condensed milk in. 1868. p. 39.....	A27.9:6
Cooperative credit associations in, and their relation to agricul- tural interests (Peters). 1892 .....	A27.8:3
Crop prospects of (Moffat). 1883. No. 61, p. 34; No. 64, p. 28; No. 65, p. 29; No. 1, p. 18 .....	A27.9:21
Farm animals of (Ryder). 1886. p. 353.....	A27.9:24
Farm products in—	
cost of hauling. 1897 .....	A22.4:27
domestic animals and. 1867. p. 256 .....	A27.9:5
Farm stock of. 1866. p. 246.....	A27.9:4
Farms of, decrease in size of, 1867. p. 101 .....	A27.9:5
Flax culture for seed and fiber in (Dodge). 1898.....	A11.5:10
Flax culture in (Dodge). 1892. p. 11.....	A27.8:1
same, 2d ed., p. 11 .....	A11.5:1
Forest preservation in. 1875. p. 242.....	A27.9:13
Fresh-meat shipments to. p. 312.....	A1.1:876
same, p. 374 .....	A1.1:877
Grape disease in; origin, history, phenomena, and cure (Erni). p. 324.....	A1.1:865
Hemp culture in (Dodge). 1898.....	A11.5:11
Hessian fly, parasite from, importation of (Forbes). 1891. p. 179.	A9.7:4
Highways of (Eldridge). 1902. p. 19.....	A22.3:23
Hop crops of. 1868. p. 409 .....	A27.9:6
Horse-radish, best varieties of (Fairchild). 1900 .....	A23.4:1
Insects, two beneficial, introduced into U. S. from (Howard). 1898. p. 13 .....	A9.6:17
Kites in, notes on (Abbe). 1897. p. 165 .....	A29.6:25
Magnetic survey of (Tillo). 1895. p. 465 .....	A29.3:11 <sup>a</sup>
Maize into, introduction of (Murphy). 1891. p. 5 .....	A1.8:49
Meat consumption in. 1876. p. 498 .....	A27.9:14
Meteorological phenomena in, Jan. and Feb., 1864 (Davy). No. 2. p. 94.....	A27.9:2
Phylloxera of, report on (Planchon). 1874. p. 55 .....	A27.9:12
Pure-food laws of, affecting American exports (Bigelow). 1901..	A7.3:61
Ramie in, manufacture of (Dodge). 1893. p. 12.....	A11.5:2
Rye production of. 1891. p. 338 .....	A27.9:29
Silk production in. 1872. p. 52 .....	A27.9:13
Stock diseases in. 1869. p. 65.....	A27.9:7
Sugar production of, 1877-90. p. 208 .....	A27.9:28
Transportation rates in. 1883. No. 58. p. 39 .....	A27.9:21
Trichiniasis in, extent of (Salmon). p. 475 .....	A4.1:884
same. 1884. p. 269 .....	A4.2:An5
Trichinosis in, of alleged American origin (Stiles). 1901. p. 156.	A4.3:30
Weather correspondence in (Abbe). 1895. p. 56 .....	A29.6:23
Western, prunes and prune culture in (Lake). 1901 .....	A20.3:10
Wheat prospect of (Moffat). Apr., 1883. No. 58. p. 31 .....	A27.9:21
European tree sparrow ( <i>Passer montanus</i> ), at Saint Louis, Mo., history of (Widmann). p. 191 .....	A5.3:1
See also Sparrows.	

\* By a misprint, this page number appears twice.

# Index

	Classification no.
Eurytominae. <i>See</i> Grass and grain joint-worm flies.	
Eustis, Lake County, Fla., thunderstorms at (Abbe). 1897. p. 251..	A29.6:25
Eustrotia caduca, preparatory stages of (Kellicott). 1891. p. 321 ..	A9.7:3
Evans, A. W. Liverworts from southern Patagonia, collected by U. S. S. "Albatross" in 1887-91, list of. 1892. p. 140 .....	A6.5:1
Evans, Edward A.:	
Freshets in James River, Va., 1893-96. p. 590.....	A29.6:28
James River Valley, physical features and flood conditions of. 1899. p. 250 .....	A29.6:27
Meteorological and other forms and reports: should they be sim- plified; are modifications desirable? 1902. p. 168.....	A29.3:31
Evans, Frank L. <i>See</i> , for reports as Chief, Accounts and Disburse- ments Division, Agriculture Department, 1893-1902 .....	A2.
Evans, Walter Harrison:	
Agricultural experiment stations, collective exhibit of, at Paris Exposition, 1900. catalogue of. p. 633 .....	A10.3:80
Agricultural investigations in Hawaii, Porto Rico, and Philip- pines. 1901. p. 503.....	A1.10:901
Agricultural outlook of coast region of Alaska. 1897. p. 553....	A1.10:897
Alaska, agriculture in. 1898. p. 4 .....	A10.3:48
Botanical survey in Alaska. 1898. p. 48 .....	A10.3:62
Copper sulphate and germination; treatment of seed with copper sulphate to prevent attacks from fungi. 1896 .....	A28.3:10
Cotton, botany of. 1896. p. 67 .....	A10.3:33
New York City, [2d] international conference on plant breeding and hybridization, 1902, report on. 1902. p. 208.....	A10.6:14
Paris, international congresses of horticulture, viticulture, and agriculture. 1901. p. 205.....	A10.6:12
Weed destruction by means of chemicals. 1901. p. 19 .....	A1.9:124
Wild cherry leaves, poisoning by. p. 16 .....	A1.9:103
Evaporated apples, zinc in (Wiley). 1896 .....	A7.3:48
Evaporation:	
Experiments on Kings River, Calif. 1901. p. 323.....	A10.3:100
Fort Collins, Colorado (Abbe). 1897. p. 210.....	A29.6:25
Notes on (Abbe). 1895. p. 421.....	A29.6:23
Temperature and, notes on (Abbe). 1898. p. 213.....	A29.6:26
Underground, report on (Balch). 1901. p. 545 .....	A29.6:29
<i>See also</i> Atmidometry.	
Evergreen and other forest trees, causes of destruction of in northern New England and New York—	
[1st] report (Packard). p. 138.....	A1.1:883
same, p. 138 .....	A9.1:883
2d report, p. 374 .....	A1.1:884
3d report, in northern New England, p. 319 .....	A1.1:885
same, additions to 3d report, p. 17 .....	A9.3:12
4th report, 1886. p. 20.....	A9.3:13
5th report, 1887.....	A8.1:4
Evening, character of, notes on (Abbe). 1898. p. 215 .....	A29.6:26
Same (Connor). 1898. p. 306 .....	A29.6:26
Everhart, Benjamin M. <i>See</i> , as joint author, Ellis, J. B.	
Evotomys:	
Black Hills of South Dakota, description of new (Merriam). 1890. p. 119 .....	A5.5:5
Colorado, description of new (Merriam). 1890. p. 23.....	A5.5:4
Two new species of, from Pacific coast region, description of (Merriam). 1890. p. 25 .....	A5.5:4
Ewell, Ervin Edgar:	
Cocoa preparations, adulteration of. p. 933 .....	A7.3:137
Farm, every, an experiment station. 1897. p. 291.....	A1.10:897
Fats and oils, specific gravity of, at temperature of boiling water, determination of. 1901. p. 119.....	A7.3:62
Fertilizing value of street sweepings. 1898 .....	A7.3:55
Sugar, analysis of, recommendations on. 1895. p. 152.....	A7.3:47
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Ewell, Ervin Edgar, Bigelow, Willard Dell, and Page, Logan Waller. Chemistry Bureau, Agriculture Department, exhibit of, at Pan-American Exposition, Buffalo, N. Y., 1901 .....	A7.3:63

	<b>Index</b> Classification no.
Exchange Bureau. <i>See</i> Information and exchange bureau.	
Exchanges, foreign, system of, report on. p. 530 .....	A1.1:868
Exotic collection. <i>See</i> Agriculture Department.	
Experiment, its conception and methods of procedure (Bolley). 1898. p. 47 .....	A10.3:49
Experiment station, every farm an (Ewell). 1897. p. 291 .....	A1.10:897
Experiment station record, vols. 1-11 .....	A10.6:
Experiment station work, nos. 1-20; a series of "brief popular bul- letins, compiled from published reports of agricultural experi- ment stations and kindred institutions in this and other countries," and assigned various numbers in the Farmers' Bulletin series. References to each article will be found under their proper headings .....	A1.9:
<i>See also</i> Note under A10.11:.	
Experiment stations. <i>See</i> Agricultural colleges and experiment stations—Agricultural experiment stations—Engineering ex- periment stations.	
Experiment Stations Office, Agriculture Department:	A10.
Irrigation investigations of, scope and purpose of (Mead). 1902. p. 417 .....	A10.1 <sup>2</sup> :901
Library and publications of, circular regarding. 1889 .....	A10.4:12
Nutrition investigations of, scope and results of. 1902. p. 437....	A10.1 <sup>2</sup> :901
Organization and first work of. 1889. p. 13 .....	A10.3:1
Publications of—	
circular regarding. n. d. ....	A10.4:16
list of, 1888-1899 (Harlow). 1900. p. 508 .....	A10.3:80
Work of, for farmer (True). 1897. p. 135 .....	A1.10:897
Work of (True). 1895. p. 39 .....	A10.3:24
Experimental farm, Agriculture Department, report of superintend- ent, 1865. p. 25 .....	A1.1:865
Experimental gardens and grounds, office, Agriculture Department, work of, for farmers (Saunders). 1897. p. 180 .....	A1.10:897
Experiments of Agriculture Department, protest against proposed legislation restricting. [With copy of Senate bill 1063.] May 25, 1897 .....	A1.2:Ex6 <sup>2</sup>
Explosive noises at Franklinville, N. Y. (Kales). 1897. p. 393 .....	A29.6:25
Export trade in live stock and meat products, correspondence relating to (Rusk). 1893 .....	A1.8:53
Exports:	
American, pure-food laws of European countries affecting (Bige- low). 1901 .....	A7.3:61
Imports and. Jan., 1866. pp. 28, 86 .....	A27.9:4
same, reports on, 1893-99 .....	A12.4:
Provision, 1856-62. No. 5. p. 7 .....	A27.9:1
<i>See also</i> Agricultural exports—Agricultural products.	
Exsiccati, new, report on (Fairchild). 1889. p. 160 .....	A28.5:5
Extracts, flavoring, analysis of, provisional methods for (Mitchell). 1902. p. 69 .....	A7.3:65
Eycleshymer, A. C. Club root in United States. 1891. p. 79 .....	A28.5:7
Eye:	
Diseases of, of horses (Law). p. 247 .....	A4.2:H78
Human, trematodes parasitic in (Monostomulum lentis and agamodistomum ophthalmobium) (Stiles). 1902. p. 24 .....	A4.3:35
Eye and its appendages, diseases of, of cattle (Trumbower). p. 353.	A4.2:C29 <sup>2</sup>
Factories, refuse matter of, as fertilizers. 1867. p. 158 .....	A27.9:5
Factory cheese and how it is made (Merry). 1896. p. 45 .....	A4.3:15
Same, reprinted. n. d. ....	A4.4:19
<i>See also</i> Cheese.	
Fairbanks, George R. Florida freezes for century and half. 1895. p. 336 .....	A29.6:23
Fairchild, David Grandison:	
Berseem, the great forage and soiling crop of Nile Valley. 1902..	A19.3:23
Bordeaux mixture as a fungicide. 1894 .....	A28.3:6
Exsiccati, new, report on. 1889. p. 160 .....	A28.5:5
Fungicides, experiments with, to prevent leaf-blight of nursery stock. 1891. p. 338 .....	A28.5:7
Grape, diseases of, in western New York. 1891. p. 95 .....	A28.5:6

# Index

	Classification no.
Fairchild, David Grandison—Continued	
Hop culture in Bohemia. 1899.....	A6.4:19
Horse-radish—	
best varieties of Europe, and methods of cultivation. 1900...	A23.4:1
culture in Bohemia, circular on. 1899.....	A6.4:20
Leaf diseases of nursery stock in western New York, experiments in preventing. 1891. p. 240.....	A28.5:7
Lebbek, or siris tree, circular on. 1900.....	A6.4:23
North American mycological literature, index to. 1891. pp. 42, 80, 128, 184.....	A28.5:6
same, p. 52.....	A28.5:7
Plant introduction, systematic, its purposes and methods. 1898..	A13.3:21
Spanish almonds, and their introduction into America. 1902....	A19.3:26
Svalöf, Sweden, station for plant breeding at. 1901. p. 814.....	A10.6:13
Yams in West Indies, circular on. 1899.....	A6.4:21
Znaim cucumbers, cultivation of. 1901.....	A23.4:2
<i>See also</i> , as joint author, Galloway, Beverly Thomas—Halsted, Byron David—Lathrop, Barbour—Swingle, Walter Ten-nyson.	
Fairchild, George Thompson:	
Agricultural education, evolution of, president's address to Associa- tion of American Agricultural Colleges and Experiment Stations at 11th annual convention, 1897. 1898. p. 32.....	A10.3:49
Colleges of agriculture, what should be taught in? 1896. p. 69..	A10.3:41
Study, relation of technical to general course of. 1893. p. 67...	A10.3:16
Fairfield, W. H. Water on Laramie Plains, Wyoming, duty of, 1899. 1902. p. 215.....	A10.3:104
Fairman, Charles E:	
Black spot of asparagus berries. 1889. p. 157.....	A28.5:5
Penestrate sporidia, development of some, observations on. 1891. p. 29.....	A28.5:6
Fungi, new or rare, from western New York, notes on. 1889. p. 78.....	A28.5:5
Fairs, Southern, agriculture representation at. 1869. p. 365 *.....	A27.9:7
Fake, N. J. <i>See</i> , as joint author, Crampton, C. A.	
Falconer, William:	
Mushroom beds, directions for preparation and spawning of. p. 17.	A18.5:1
Mushroom industry, review of. 1894. p. 20.....	A18.5:1 <sup>2</sup>
Mushrooms, how to grow. 1897.....	A1.9:53
Falkner, J. M. Roads, good, duty of general government toward. 1902. p. 31.....	A22.3:23
Fall army worm. <i>See</i> Army worm.	
Fallot, B. Copper in wines. 1890. p. 96.....	A6.3:11
Famines and droughts in India (Eliot). 1895. p. 444.....	A29.3:11 <sup>2</sup>
Famines in India (Archibald). 1900. p. 246.....	A29.6:28
Farcy. <i>See</i> Glanders and farcy.	
Farina or potato-flour, report on (Macrae). p. 390.....	A1.1:875
Farlow, William Gilson. Fungi, some edible and poisonous. 1897. p. 453.....	A1.10:897
Same, reprinted. 1898.....	A28.3:15
Farm:	
Birds, four common, of garden and (Judd). 1895. p. 405.....	A1.10:895
Birds on, value of (Samuels). p. 201.....	A1.1:867
British, increased production of. 1873. p. 488.....	A27.9:11
Butter making on (Goodrich). 1897.....	A1.9:57
Cold storage on (Clark). 1900. p. 9.....	A1.9:119
European, decrease in size of. 1867. p. 101.....	A27.9:5
Every, an experiment station (Ewell). 1897. p. 291.....	A1.10:897
Exodus from the, what are causes of (Roberts). 1896. p. 80...	A10.3:41
<i>See also</i> Davenport, E.	
Experiment reports for popular use, preparation of. 1885. p. 93.....	A1.7:9
Forests, relation to (Fernow). 1895. p. 333.....	A1.10:895
Local taxation as affecting. 1897.....	A27.9:35
Management of, in England. 1871. p. 474.....	A27.9:9

\* By a misprint, this page number appears twice.

**Farm—Continued**

Milk on, care of (Pearson). 1897 .....	A1.9:63
Model, and agricultural colleges, letter on (McChesney). 1868. p. 460.....	A27.9:6
Number and value of, increase and decrease in, 1880-90. p. 194.	A27.9:32
Pests of, in Australia. 1887. p. 535 .....	A27.9:25
Poultry raising on (Salmon). 1901 .....	A1.9:141
same. p. 235.....	A4.1:900
Prize, in Normandy. 1876. p. 117.....	A27.9:14
Pure water on, importance of. 1898. p. 3.....	A1.9:73
Resources and products of, special statistics. 1868. pp. 3, 63, 111, 189, 249.....	A27.9:6
Roads, best for farming districts and (Stone) 1894. p. 501 .....	A1.10:894
Small, large profits from. 1873. p. 193.....	A27.9:11
Succulent forage for (Williams). 1899. p. 613.....	A1.10:899
Transportation on. 1901. p. 690.....	A1.10:901
Value of, and of mortgages on farms. 1896. p. 599 .....	A1.10:896
Waste places on, tree planting in (Keffer). 1896. p. 323.....	A1.10:896
<i>See also</i> Agriculture—Agricultural products—Crops—Experi- mental farm—Seed testing—headings beginning "Farm," "Farmers," "Farming."	
Farm accounts, system of (Bourne). p. 502.....	A1.1:865
<b>Farm animals:</b>	
Australia, diseases of. 1887. p. 535.....	A27.9:25
Commercial movements of, 1875-86. p. 152 .....	A27.9:25
<b>Condition of—</b>	
Jan., 1864. No. 1. p. 36 .....	A27.9:2
Apr., 1864. No. 2. p. 34.....	A27.9:2
Jan., 1865. No. 4. p. 22.....	A27.9:3
1867. p. 132 .....	A27.9:5
1868. p. 173 .....	A27.9:6
1869. p. 85 .....	A27.9:7
1870. p. 121 .....	A27.9:8
1871. p. 98 .....	A27.9:9
1872. p. 112 .....	A27.9:10
1876. p. 81 .....	A27.9:14
1878. No. 10. p. 6.....	A27.9:17
1883— .....	A27.9:
<b>Diseases of—</b>	
1870. p. 125 .....	A27.9:8
1871. p. 103 .....	A27.9:9
1872. p. 120 .....	A27.9:10
1873. p. 153 .....	A27.9:11
1874. p. 201 .....	A27.9:12
1875. p. 161 .....	A27.9:13
1876. p. 84 .....	A27.9:14
<i>See also</i> Diseases of animals.	
Europe (Ryder). 1886. p. 353 .....	A27.9:24
Feeding of (Allen).....	A1.9:22
Fences and laws relating to. p. 394.....	A1.1:869
Foreign countries. 1887. p. 135 .....	A27.9:26
General condition of. 1883. p. 302 .....	A4.2:An <sup>5</sup>
Molasses as a food for (Langworthy). 1899. p. 17.....	A1.9:107
Movement of. p. 207.....	A4.1:897
<b>Numbers and values of—</b>	
1859. No. 2. p. 18 .....	A27.9:2
1866. p. 184 .....	A27.9:4
1867. p. 111 .....	A27.9:5
1870. p. 67 .....	A27.9:8
1871. p. 55 .....	A27.9:9
1872. p. 51 .....	A27.9:10
1880. No. 21 .....	A27.9:18
1882. No. 42 .....	A27.9:20
1883. No. 56 .....	A27.9:21
1884. No. 4 .....	A27.9:22
1893. No. 101A .....	A27.9:31
1870-96. p. 253 .....	A4.1:897

## Index

	Classification no.
<b>Farm animals—Continued</b>	
Numbers and values of—Continued	
1880-96 .....	A27.8:11
1897 and 1898. p. 597 .....	A4.1:898
1899. p. 668 .....	A4.1:899
1900. p. 638 .....	A4.1:901
Range or average price of, at Chicago—	
1897 and 1898. p. 579 .....	A4.1:898
1899. p. 673 .....	A4.1:899
1900. p. 569 .....	A4.1:900
Receipts and shipment of, 1896-98. p. 550 .....	A4.1:898
Statistics of—	
1895. p. 533 .....	A1.10:895
1896. p. 559 .....	A1.10:896
1897. p. 710 .....	A1.10:897
1898. pp. 678, 702 .....	A1.10:898
1899. p. 759 .....	A1.10:899
1900. p. 824 .....	A1.10:900
1901. p. 771 .....	A1.10:901
<i>See also</i> , for annual reports on, A27.1:	
Switzerland. 1866. p. 430 .....	A27.9:4
United States and Europe. 1866. p. 246 .....	A27.9:4
Wintering. 1875. p. 84 .....	A27.9:13
World. 1888. p. 28 .....	A27.9:26
same. 1893. p. 54 .....	A27.9:31
<i>See also</i> Animals, domestic.	
Farm animals and their products. 1901. p. 771 .....	A1.10:901
Farm buildings:	
Model, report on. p. 283 .....	A1.1:867
Practical suggestions for (Hill). 1901 .....	A1.9:126
<i>See also</i> Stave silo.	
Farm capital. 1870. p. 42 .....	A27.9:8
Farm crops. <i>See</i> Farm products.	
Farm drainage (Elliott). 1896 .....	A1.9:40
Farm experiments, Agriculture Department:	
1867 (Farquhar). p. 187 .....	A1.1:867
1868. p. 412 .....	A1.1:868
1869. p. 267 .....	A1.1:869
1870. p. 452 .....	A1.1:870
1871. p. 238 .....	A1.1:871
1872. p. 454 .....	A1.1:872
1873. p. 289 .....	A1.1:873
1874. p. 255 .....	A1.1:874
1875. p. 502 .....	A1.1:875
Farm implements:	
American and European. 1883. No. 56 .....	A27.9:21
Improved (Todd). p. 225 .....	A1.1:866
Farm implements and machinery:	
Course of prices of, for series of years (Holmes). 1901 .....	A27.8:18
Report on (Thomas). p. 410 .....	A1.1:862
Farm insects. <i>See</i> Insects.	
Farm labor:	
Irish, wages of. 1870. p. 290 .....	A27.9:8
Wages of, rate of, in U. S.—	
1867. p. 4 .....	A27.9:5
1870. p. 3 .....	A27.9:8
1875. p. 261 .....	A27.9:13
1882. No. 43 .....	A27.9:20
1884. No. 4 .....	A27.9:22
1885. No. 18 .....	A27.9:23
1888. p. 169 .....	A27.9:26
1890. p. 200 .....	A27.9:28
1840-92 (Dodge) .....	A27.8:4
1866-99, result of eleven statistical investigations .....	A27.8:22
Farm manure, report on (Hébert). 1895. p. 141 .....	A10.6:5
Farm practice and fertilizers as insecticides (Smith). 1893. p. 93 ..	A9.7:6



# **Index** Classification no.

<b>Farm prices:</b>	
Cape Colony (Stowe). p. 523 .....	A4.1:898
Market quotations and. 1893. p. 485 .....	A27.9:31
same. 1894. p. 732 .....	A27.9:32
Of two centuries. 1892. p. 332 .....	A27.9:30
Seventy years ago. 1891. p. 482 .....	A27.9:29
<b>Farm products:</b>	
Acreage, production, and value of, 1866 to 1895 .....	A27.4:1
Cost of hauling to market or to shipping points in European countries, reports of consuls on. 1897 .....	A22.4:27
Fertilizing constituents of—	
1894. p. 565 .....	A1.10:894
1895. p. 566 .....	A1.10:895
1896. p. 611 .....	A1.10:896
Legal weights of, per bushel. 1891. p. 93 .....	A27.9:29
Local exchanges of. 1875. p. 95 .....	A27.9:13
Market prices for, monthly, Aug., 1870, to Dec., 1876 .....	A27.9:
Marketing (Hill). 1897 .....	A1.9:62
Primary prices of. 1892. p. 299 .....	A27.9:30
Shrinkage of. 1902. p. 10 .....	A1.9:149
Yield and home prices of—	
1869. p. 14 .....	A27.9:8
1870. p. 3 .....	A27.9:9
1871. p. 4 .....	A27.9:10
<i>See also</i> Agricultural products—Crops—Produce.	
Farm records, 1850-71. p. 68 .....	A27.9:10
Farm stock. <i>See</i> Farm animals.	
<b>Farmers:</b>	
Agricultural experiment station as educator of (Caldwell). 1882. p. 20 .....	A1.8:22
Better times for. 1891. p. 181 .....	A27.9:29
Chicory growing as addition to resources of, in America (Kains). 1898 .....	A6.3:19
Closer intimacy between experiment stations and farmers' institute as promoter of. 1902. p. 78 .....	A10.3:120
Cotton seed to, value of (Beal). 1901. p. 24 .....	A1.9:124
Daughters of, education of (Dodge). p. 441 .....	A1.1:866
Debts of. 1887. p. 78 .....	A27.9:25
Employment agencies for use of, list of (West) .....	A27.4:13
Example for American .....	A12.4:4
Families of, health of (Hall). p. 453 .....	A1.1:862
Forestry for (Fernow). 1894. p. 461 .....	A1.10:894
same, with additional matter .....	A1.9:67
Frauds upon. 1886. p. 71 .....	A27.9:24
Gardens of (Brown). p. 337 .....	A1.1:863
Good roads and how to get them, views on (Creasy). 1901. p. 78 .....	A22.3:21
Good roads for (Eldridge) .....	A1.9:95
Hawks and owls as related to (Fisher). 1894. p. 215 .....	A1.10:894
Houses of, places and plans for (Hall). p. 313 .....	A1.1:863
How can agricultural experiment station reach and interest? (Roberts). 1889. p. 30 .....	A10.5:1
Interest of—	
in finance. 1896 .....	A27.4:3
in good seed (Pieters). 1900 .....	A1.9:111
Milling companies for. 1890. p. 294 .....	A27.9:28
Money value of good roads to (Latta). 1896 .....	A22.4:23
Mutual interests and relations of Agriculture Department and, farmers' institute as medium for developing (True). 1902. p. 102 .....	A10.3:120
Of what service are statistics to the? (Hyde). 1898 .....	A1.10:897
same, reprint .....	A27.8:14
Organizations of—	
cooperation of agricultural experiment stations with, in experiment work (Jenkins). 1895. p. 50 .....	A10.3:24
how may they hasten teaching of agriculture in public schools. 1902. p. 89 .....	A10.3:120
Pioneer, in Alaska, suggestions to (Georgeson). 1902 .....	A10.10:1

# Index

	Classification no.
<b>Farmers—Continued</b>	
Popular education for, in U. S. (True). 1897. p. 279 .....	A1.10:897
Practical assistance to, in handling forest lands (Pinchot). 1898.	A13.4:21
Road question, views on (Bean). 1901. p. 67 .....	A22.3:21
Sons of—	
entomology for, practical. p. 305.....	A1.1:868
home life, training, and ambition of (Adams). p. 307 .....	A1.1:863
Southern, suggestions to. 1899.....	A1.9:98
Tax on, as produce brokers. 1870. p. 77 .....	A27.9:8
Toad as a friend of. 1899. p. 28 .....	A1.9:87
Vegetable garden of. 1902. p. 6.....	A1.9:149
Weather forecasting for (Reed). 1900. p. 287 .....	A29.6:28
What meteorology is doing for (Harrington). 1894. p. 117.....	A1.10:894
Work of Agriculture Department for. <i>See</i> Names of divisions, bureaus, and offices in Agriculture Department.	
<i>See also</i> Agriculturist—English farms and farmers.	
Farmers' Alliance, National, officers of. 1898. p. 627 .....	A1.10:898
Farmers' bulletins:	
Available for distribution, list of .....	A21.2:F22
Distribution of, general orders relative to, 1895-97 .....	A1.2:P96
List of.....	A1.9:
Farmers' clubs:	
List of—	
1870 .....	A1.8:4
1872 .....	A1.8:5
1876 .....	A1.8:12
Notes on. 1871. p. 471 .....	A27.9:9
Report on (Nutting). p. 236.....	A1.1:867
<i>See also</i> Agricultural societies and farmers' clubs—American Insti- tute Farmers' Club—West Newbury (Mass.) Farmers' Club.	
Farmers' Institute Workers, American Association of, proceedings of sixth annual meeting, held at Buffalo, N. Y., Sept. 18 and 19, 1901; edited by A. C. True, D. J. Crosby, and G. C. Creelman. 1902.....	A10.3:110
Same, 7th annual meeting.....	A10.3:120
Farmers' institutes:	
Factor in creating desire for agricultural education. 1902. p. 68.	A10.3:120
History and status in U. S. and Canada (Bailey). 1900.....	A10.3:79
Illustration and demonstration work at (Curryer). 1902. p. 52.	A10.3:110
Lectures at, note on (Abbe). 1900. pp. 20, 67 .....	A29.6:28
Local help in (Latta). 1902. p. 36.....	A10.3:110
Managers or officials in charge—	
1898. p. 610 .....	A1.10:898
1899. p. 687 .....	A1.10:899
1900. p. 643 .....	A1.10:900
1901. p. 621 .....	A1.10:901
Medium for developing mutual interests and relations of farmers and Agriculture Department (True). 1902. p. 102.....	A10.3:120
Ontario (Creelman). 1902. p. 32.....	A10.3:110
Promoter of closer intimacy between farmers and experiment sta- tions (Voorhees). 1902. p. 78.....	A10.3:120
Question box at (Amoss). 1902. p. 49 .....	A10.3:110
Relation of—	
agricultural colleges and experiment stations to (Hutchin- son). 1902. p. 33 .....	A10.3:110
agricultural associations to (Dye). 1902. p. 44.....	A10.3:110
Agriculture Department to (True). 1902. p. 22.....	A10.3:110
to our industrial population (Hoard). 1902. p. 20.....	A10.3:110
Report of committee of Association of American Agricultural Col- leges and Experiment Stations on. 1898. p. 46.....	A10.3:49
Report on (True and Hall). 1897. p. 635 .....	A10.6:7
same, memorandum for. 1889 .....	A10.4:9
Work accomplished in Maryland, 1902 (Amoss). p. 25 .....	A10.3:120
Work of, best method of publishing results of (Collingwood). 1902. p. 39 .....	A10.3:110

**Farmers' institutes—Continued**

**Worker at—**

- address on, before American Association of Farmers Institute  
Workers (Spillman). 1902. p. 59..... A10.3:120  
requisites of a good (Dawley). 1902. p. 42..... A10.3:110  
Young people attending, how to interest and instruct (Spencer).  
1902. p. 42..... A10.3:110

*See also* Women's farm institutes.

**Farmers' National Congress, officers of:**

1898. p. 627..... A1.10:898  
1899. p. 717..... A1.10:899  
1900. p. 671..... A1.10:900  
1901. p. 637..... A1.10:901

**Farmers' reading courses:**

- Description of, with list of State officers. 1899. p. 717..... A1.10:899  
Scope and methods of (Bailey). 1899..... A10.3:72  
same, abridgment..... A1.9:109

**Farming:**

- Aroostook County, Maine. 1869. p. 149..... A27.9:8  
Association in, practical results of. p. 113..... A27.9:12  
High, as illustrated in history of Netherlands (Tilden). p. 527.. A1.1:866  
Influence of different systems of, on fertility of soil. 1899. p. 9. A1.9:87  
Modern, in America (Taveau). p. 280..... A1.1:874  
New England—  
does it pay? p. 187..... A1.1:874  
report on. p. 255..... A1.1:870  
Northern and southern planting (Watts). 1872. p. 207..... A27.9:10  
same. 1872. p. 359..... A27.9:10  
*See also* Agriculture—Farm—Perfumery farming—Truck farm-  
ing.

Farquhar, W. H. Farm experiments. p. 187..... A1.1:867

Fasciation, example of (Vasey). 1873. p. 171..... A27.9:11

**Fassbender, Dr.:**

- Cattle foods, work in, communications from foreign chemists  
taking part in. 1894. p. 170..... A7.3:43  
Potash determination, results on official samples and descriptions  
of methods employed. 1894. p. 25..... A7.3:43

**Fassig, Oliver Lanard:**

- Baltimore temperature curve for May, normal, marked rise in.  
1902. p. 68..... A29.3:31  
Barometric wave, daily, westward movement of. 1901. p. 495.. A29.6:29  
same. 1902. p. 62..... A29.6:31  
Cloud photography, automatic, report of. 1896. p. 456..... A29.6:24  
German Agricultural Experiment Stations, Association of, ninth  
annual convention of, 1896, report on. 1897. p. 447..... A10.6:8  
Johns Hopkins University, meteorology at. 1898. p. 306..... A29.6:26  
Light precipitation, device for automatically recording beginning  
and ending of. 1902. p. 213..... A29.3:31  
Maryland climatological studies. 1902. p. 200..... A29.3:31  
Meteorological Congress, held at Chicago, August 21-24, 1893,  
proceedings of. p. 227..... A29.6:21  
Meteorology, bibliography of American contributions to, note  
concerning. 1895. p. 326..... A29.3:11<sup>2</sup>  
Waterspout at close range. 1902. p. 302..... A29.6:30  
Weather services, State, statistics of. 1895. p. 209..... A29.6:23  
*See also*, as editor, report of International Meteorological Con-  
gress, Chicago, 1893..... A29.3:11

Fat acids, soluble and insoluble, notes on methods for (Patrick).  
1888. p. 25..... A7.3:19

**Fats:**

- Contained in tuberculosis bacilli (De Schweinitz and Dorset).  
p. 301..... A4.1:898  
Crystallization of (Crampton). 1889. p. 449..... A7.3:13<sup>4</sup>  
Formation of, in animal body (Soskin). 1897. p. 179..... A10.6:8

*See also* Butter—Butter fat—Oils and fats.

Fatty bodies in vegetable organisms, report on methods of estimation  
of (Maxwell). 1890. p. 94..... A7.3:28

# Index

	Classification no.
Fauna. <i>See</i> North American fauna.	
Faunæ, plant, notes on (Cockerell). 1892. p. 117 .....	A9.7:5
Faveau, Augustin L. Rice culture, report on. p. 174.....	A1.1:867
Faville, Geo. C.: Maladie du coit, extirpation of, in Nebraska and South Dakota. p. 62.....	A4.1:893-4 A4.1:891-2
Nebraska, supposed maladie du coit among horses in. p. 359....	
Faville, Georges C., and Day, Charles M. Maladie du coit in Nebraska, second outbreak of. p. 134.....	A4.1:899
Fayetteville, Ark., experiment station at, laboratory notes from. 1890. p. 134 .....	A7.3:24
Featherstone, W. B. Meteorological observations of San Francisco. 1893-94. p. 128 .....	A29.6:22
February, weather condition for, statement of average (Garriott). p. 57.....	A29.6:29
Federal meat inspection (Salmon). 1894. p. 67 .....	A1.10:894
Feed, coarse, necessity of, to grow cattle (Davenport). p. 202.....	A4.1:897
Feed mills and windmills. 1902. p. 31.....	A1.9:149
Feeding: Experiments in special points bearing on (Wing). 1891. p. 93..	A10.5:3
Farm animals (Allen). 1894.....	A1.9:22
Leguminous plants for (Allen). 1894.....	A1.9:16
Management of cattle and (Henry). p. 439 .....	A4.2:C29
Value of cotton-seed products for (Kilgore). 1896. p. 385.....	A10.3:33
<i>See also</i> Foods.	
Feeding stuffs: Analyses of American, compilation of (Jenkins and Winton). 1892 .....	A10.3:11
Analysis of, official methods adopted by Belgian state laboratories and agricultural experiment stations of Holland. 1899. p. 304.....	A10.6:10
Chemical analysis, methods of, abstract of literature on. 1890-91. p. 61.....	A7.3:31
<i>See also</i> Chemical analysis, methods of.	
Composition of, for animals— 1894. p. 558 .....	A1.10:894
1895. p. 560 .....	A1.10:895
1896. p. 605 .....	A1.10:896
Condimental, use of in feeding animals. 1898. p. 25 .....	A1.9:73
Control of, needs and requirements of. 1897. p. 421 .....	A1.10:897
Digestibility of— methods of determining (Kellner). 1898. p. 504 .....	A10.6:9
report on (Jordan and Hall). 1900.....	A10.3:77
Fertilizing constituents of— 1894. p. 565 .....	A1.10:894
1895. p. 566 .....	A1.10:895
1896. p. 611 .....	A1.10:896
Markets for American, extension of .....	A12.4:7
Nitrogen, free extract of (Tollens). 1897. p. 641 .....	A10.6:8
Pentaglucooses in, notes on occurrence and quantitative estimation of (Stone). 1890. p. 125.....	A7.3:28
<i>See also</i> Cattle foods—Foods and feeding stuffs.	
Fegan, M. E. <i>See</i> , for reports as Chief, Seed Division, Agriculture Department, 1893-95 .....	A24.1:
Fehling's solution. <i>See</i> Sugar, estimation of.	
Felt, Ephraim Porter: Entomologic service, New York State, voluntary, in. 1899. p. 39.....	A9.6:20
Forest and shade tree insects in New York State, observations on. 1901. p. 63.....	A9.6:31
Hessian fly in New York State in 1901. 1902. p. 22.....	A9.6:31
Insecticides, early spring applications of, on fruit trees, some effects of. 1900. p. 22 .....	A9.6:26
Insects of New York State, notes on— 1898. p. 16 .....	A9.6:17
1899. p. 60 .....	A9.6:20
1902. p. 102 .....	A9.6:37

	<b>Index</b> Classification no.
Felt, Ephraim Porter—Continued	
Nursery-inspection laws and rulings, suggestions toward greater uniformity in. 1901. p. 161 .....	A10.3:99
Petroleum, crude, and other insecticides, further notes on. 1902. p. 49 .....	A9.6:31
Pine trees, insects attacking, observations on certain. 1902. p. 103 .....	A9.6:37
San Jose scale, experimental work in New York State against. 1902. p. 35 .....	A9.6:37
Female life in open air (Doris). p. 430 .....	A1.1:866
Fences:	
Laws relating to farm animals and. p. 394 .....	A1.1:869
Statistics of, in U. S. p. 497 .....	A1.1:871
Fenestrate sporidia, development of some, observations on (Fairman). 1891. p. 29 .....	A28.5:6
Ferguson, James M. Cotton worm, letter on. 1867. p. 288 .....	A27.9:5
Ferguson, Margaret C. Germination of spores of <i>Agaricus campestris</i> and other basidiomycetous fungi, preliminary study of. 1902. ....	A19.3:16
Fergusson, S. P.:	
Kite experiments at Blue Hill meteorological observatory. 1896. pp. 323, 327 .....	A29.6:24
same. 1897. p. 392 .....	A29.6:25
Wire, early use of, in kite flying. 1897. p. 135 .....	A29.6:25
Fermented alcoholic beverages, adulteration of (Crampton). 1887. p. 263 .....	A7.3:13 <sup>a</sup>
Fermented liquors. See Liquors.	
Fernald, Charles Henry:	
Brown-tail moth. 1898. p. 24 .....	A9.6:17
Entomology, economic, evolution of. 1896. p. 5 .....	A9.6:6
Gypsy moth in Massachusetts, notes on. 1895. p. 59 .....	A9.6:2
Pyralidæ from Death Valley, description of. 1894. p. 255 .....	A9.7:6
Fernald, H. T. Insects in Massachusetts in 1901. 1902. p. 119 ...	A10.3:115
Fernow, Bernhard Eduard:	
"Boxed" or "turpentine" timber, strength of .....	A13.4:8
Forest conditions of Rocky Mountains, introduction to reports on. 1888. p. 7 .....	A13.3:2
Forest-fire legislation in U. S. 1896 .....	A13.4:13
Forest fires, is protection against practicable? .....	A13.4:14
Forest influences, introduction and summary of conclusions to reports on. 1893. p. 9 .....	A13.3:7
Forest resources, our, facts and figures regarding briefly stated. 1896 .....	A13.4:11
Forest supplies, consumption of, by railroads, and practicable economy in their use. 1890. p. 13 .....	A13.3:4
Forestry conditions and interests of Wisconsin, discussion of. 1898. p. 7 .....	A13.3:16
Forestry Division, Agriculture Department, work of, for farmer. 1897. p. 143 .....	A1.10:897
Forestry for farmers. 1894. p. 461 .....	A1.10:894
same .....	A1.9:67
Forests, influence of, on water supplies. p. 297 .....	A1.1:889
same, p. 297 .....	A13.1:889
Forests, relation of, to farms. 1895. p. 333 .....	A1.10:895
same, p. 43 .....	A1.9:67
Forests, relation of, to water supplies. 1893. p. 123 .....	A13.3:7
Government timber tests .....	A13.4:7
Lumbermen of U. S., suggestions to, in behalf of more rational forest management .....	A13.4:10
Mechanical tests on 32 species of American woods, summary of ..	A13.4:15
Railroad ties—	
annual charges for. 1887. p. 105 .....	A13.3:1
impregnation as practiced for Prussian railways. 1894. p. 286 ..	A13.3:9
metal. 1887. p. 108 .....	A13.3:1
Rainfall and charts of rainfall. 1902. pp. 224, 225 .....	A29.6:30
Sanitary significance of forests. 1893. p. 171 .....	A13.3:7

# Index

	Classification no.
<b>Fernow, Bernhard Eduard—Continued</b>	
Snow-slides and avalanches, their formation and prevention. 1888. p. 236 .....	A13.3:2
Southern pine; mechanical and physical properties, results of investigations of J. B. Johnson and Filibert Roth. 1896 .....	A13.4:12
Spikes, notes on adhesion of. 1887. p. 62 .....	A13.3:1
State forestry commissions and forest reserves, recent legislation on. 1897 .....	A13.4:17
Statement before Committee on Agriculture, Feb. 16, 1895 .....	A13.2:St2
Timber, increasing durability of. 1898 .....	A13.4:20
Timber lands, Government, value and management of. 1884. p. 22 .....	A1.7:5
Timber physics, pt. 1; preliminary report. 1892 .....	A13.3:6
same, pt. 2, progress report, introduction. 1893. p. 1 .....	A13.3:6
Timber physics, progress in. 1898 .....	A13.4:18
Timber pines of southern United States, introduction to report on. 1897 .....	A13.3:13
Trees, age of and time of blazing determined by annual rings. 1897 .....	A13.4:16
Turpentine gathering, effect of, on timber of pine .....	A13.4:9
What is forestry? 1891 .....	A13.3:5
Wood, characteristics and properties of, introduction to elementary discussion of. 1895. p. 5 .....	A13.3:10
See also, for reports as Chief, Forestry Division, Agriculture Department, 1886-1897 .....	A13.1:
See also, as reviser, Spalding, V. M.	
Fernow, Bernhard Eduard, and Roth, Filibert. Wood, different kinds, how to distinguish. 1895. p. 59 .....	A13.3:10
<b>Ferns:</b>	
Collected in Mexico by J. N. Rose during months of August and September, 1897 (Davenport). 1899. p. 146 .....	A6.5:5
Southern Patagonia, collected by U. S. S. "Albatross" in 1887-91, list of (Eaton). 1892. p. 138 .....	A6.5:1
See also Asplenium.	
Ferrel, William, short biography of (Connor). 1898. p. 457 .....	A29.6:28
Ferrouillat, Paul. Plants, mildew and other fungus diseases of, apparatus for combating. 1888. p. 87 .....	A6.3:5
Fertility, Lawes's views of (Scott). 1883. p. 76 .....	A1.7:2
Fertilization of soil as affecting orange in health and disease (Webber). 1894. p. 193 .....	A1.10:894
Fertilizer industry; review of statistics of production and consumption, with abstract of State laws for analysis and sale (Hyde). 1898 .....	A27.8:13
<b>Fertilizers:</b>	
Abstracts of reports of agricultural experiment stations on. 1889-1902 .....	A10.6:
Analysis, official methods of, adopted by Belgian State laboratories and agricultural experiment stations of Holland. 1899. p. 304 .....	A10.6:10
As insecticides; paper read before 2d annual meeting, Association of Economic Entomologists, 1890 (Smith). p. 217 .....	A9.7:3
same, 5th annual meeting, 1893 (Smith). p. 93 .....	A9.7:6
Ashes as—	
are they economical at present prices? 1897. p. 24 .....	A1.9:65
supply of (Fleischmann). 1884. No. 9. p. 28 .....	A27.9:22
Availability of. 1898. p. 5 .....	A1.9:73
Bone. 1870. p. 277 .....	A27.9:8
Bones used as, new process for dissolving. 1866. p. 337 .....	A27.9:4
Chemical, germination of seeds as affected by (Hicks). 1900 .....	A6.3:24
Chemical tables of. 1894. p. 571 .....	A1.10:894
Coal ashes as. 1868. p. 461 .....	A27.9:6
Commercial—	
composition and use (Voorhees). 1896 .....	A1.9:44
law on, in Connecticut. 1870. p. 151 .....	A27.9:8
sale of, uniformity in legislation with regard to (De Ghequier). 1885. p. 46 .....	A7.3:7
Complete, nitric nitrogen in, Ulsch method in determining (Street). 1892. p. 88 .....	A7.3:35



**Fertilizers—Continued**

Concentrated, in Southern States. p. 396 .....	A1.1:868
Containing cotton-seed meal, report on determination of available phosphoric acid in (Dancy). 1890. p. 161.....	A7.3:28
Containing organic materials, total phosphoric acid in, determination of (Shiver). 1891. p. 109.....	A7.3:31
Cooperative experimenting as a means of studying effects of fertilizers and feeding capacities of plants (Atwater). 1882 .....	A1.8:18
Cooperative field experiments with (Thorne). 1889 .....	A10.4:7
Cotton (McBryde). 1894 .....	A1.9:14
Crop requirements (Beal). 1899. p. 5 .....	A1.9:107
Determination of phosphoric acid and nitrogen in, in same weighed quantity of substance (De Roode). 1891. p. 104....	A7.3:31
Effect of, on proportion of grain to straw or stover. 1897. p. 11.	A1.9:56
Effects of, and feeding capacities of plants, cooperative experimenting as a means of studying (Atwater). 1882. p. 27.....	A1.8:22
Experiments with—	
for prevention and cure of peach yellows, 1889-92 (Smith) ...	A28.3:4
on fruits and vegetables, to study variations of feeding capacities of plants due to action of fertilizers. 1891.....	A10.4:19
Fraud in—	
1870. p. 358 .....	A27.9:8
1898. p. 5 .....	A1.9:79
Garden crops (Clark). 1898. p. 12 .....	A1.9:105
Home-made. 1870. p. 358 .....	A27.9:8
Home-mixed vs. factory-mixed. 1898. p. 5 .....	A1.9:84
Human excrement as, value of (Brown). 1872. p. 312.....	A27.9:10
Inspection laws—	
proposed reforms in (Wheeler and others) .....	A7.4:3
uniform, report of standing committee of American Agricultural Colleges and Experiment Stations on. 1900. p. 54.	A10.3:99
same. 1901. p. 27.....	A10.3:115
Local preferences for. 1875. p. 68 .....	A27.9:13
Mineral—	
new. 1870. p. 357.....	A27.9:8
note on (McMurtrie). 1873. p. 31.....	A27.9:11
of Atlantic States. p. 367 .....	A1.1:868
of Mississippi Valley. p. 548.....	A1.1:869
Mixed—	
nitrogen in, availability of (Terne). 1893. p. 40.....	A7.3:38
same (Hayes). 1895. p. 112 .....	A7.3:47
variable ammonia results in (Williams). 1901. p. 28 .....	A7.3:62
Mixing, as a matter of economy. 1897. p. 27.....	A1.9:65
Nitrification of certain, rate of (Withers and Fraps). 1901. p. 28.....	A7.3:62
Nitrogen in—	
report of committee on (French Association of Sugar Chemists). 1887. p. 54 .....	A7.3:16
report on (Davenport). 1898. p. 14 .....	A7.3:56
Nitrogenous, for market-garden crops (Smith). 1901. p. 12 .....	A1.9:124
Phosphates as. 1897. p. 12 .....	A1.9:56
Phosphatic mineral. 1875. p. 62.....	A27.9:14
Phosphoric acid in, method of determining. 1886. p. 43.....	A7.3:12
Potash in, report on some sources of error in determination of (Scovell and others). 1896. p. 42.....	A7.3:49
Refuse matter of factories as. 1867. p. 158.....	A27.9:5
Samples of—	
bottled, loss of moisture in, when closed with cork (Battle). 1891. p. 159 .....	A7.3:31
preparation of—	
effect of finer grinding in (Battle). 1891. p. 160.....	A7.3:31
for analysis, notes on (Stillwell and Gladding). 1893. p. 19.....	A7.3:38
Soil tests with, explanations and directions for. 1889.....	A10.4:8
Strawberry requirements. 1902. p. 17.....	A1.9:149

# Index

	Classification no.
<b>Fertilizers—Continued</b>	
Use of—	
meeting of those interested in, circular relative to. 1889 .....	A10.4:2
suggestions regarding. 1898. p. 26.....	A1.9:69
Various formulæ for. 1872. pp. 76, 137, 218.....	A27.9:10
Various, results of field experiments with (Atwater). 1883 .....	A1.8:31
<i>See also</i> Agricultural chemistry — Alfalfa — Ashes — Barnyard manure — Chemical analysis, methods of — Farm manure — Green manuring and manures — Guano — Humus — Lime — Limestone — Liquid manuring — Manures — Marls — Muck — Nitric nitrogen — Nitrogen — Potash.	
<b>Fertilizing constituents of feeding stuffs and farm products:</b>	
1894. p. 565 .....	A1.10:894
1895. p. 566 .....	A1.10:895
1896. p. 611 .....	A1.10:896
<b>Fertilizing value of:</b>	
Barnyard manure. 1897. p. 24.....	A1.9:56
Lime, different forms of (Beal). 1901. p. 12.....	A1.9:124
Manure from cows. 1899. p. 5.....	A1.9:97
Street sweepings (Ewell). 1898.....	A7.3:55
Fetlock, diseases of, of horses (Holcombe). p. 357 .....	A4.2:H78
Fesler, John H. Rainfall of Amoy, China. 1897-1902. p. 486 ....	A29.6:30
<b>Fiber:</b>	
Classification of, structural and economic, with descriptive catalogue of useful fiber plants of the world (Dodge). 1897.....	A11.5:9
Crude, determination of—	
notes on (Fraps). 1901. p. 112.....	A7.3:62
preliminary investigations relating to (Huston and McBride). 1893. p. 135 .....	A7.3:38
Culture or machinery, Agriculture Department circular of inquiry in regard to. 1890. p. 99 .....	A27.8:1
same, 2d ed., p. 99.....	A11.5:1
Determination of, in Scotland (Aitken). 1894. p. 172 .....	A7.3:43
Estimation of, in substances rich in carbohydrates, report of committee on. 1891. p. 63.....	A7.3:31
Experiments, history of, etc. (Dodge). 1894 .....	A11.5:6
Flax culture for, in U. S. (Dodge). 1892.....	A11.5:4
same, in U. S. (Dodge). 1895 .....	A1.9:27
same, in Europe and America (Dodge). 1898 .....	A11.5:10
Identification of (Seaman). 1897. p. 352 .....	A11.5:9
Ixtle, letter on (Murphy). 1869. p. 232 .....	A27.9:7
same. 1870. p. 354.....	A27.9:8
Machinery and processes, list of patents for, Jan. 1875-Dec. 31, 1879. p. 609 .....	A1.1:879
Pentosan-free crude, determination of (Fraps). 1902. p. 51....	A7.3:67
Production in U. S., present status of (Dodge). 1892. p. 43....	A27.8:1
same, 2d ed. p. 43 .....	A11.5:1
Vegetable, in collection of Agriculture Department at Philadelphia Centennial Exhibition of 1876 (Dodge). p. 497.....	A1.1:879
<i>See also</i> Agaves — Flax — Hemp — Ixtle fiber — Leaf fibers of U. S. — New Zealand flax — Pentosan-free crude fiber — Pine-apple fiber — Textile fibers.	
<b>Fiber Investigation Office, Agriculture Department:</b>	A11.
Work of, for farmer (Dodge). 1897. p. 224 .....	A1.10:897
<b>Fiber plants:</b>	
Raising and testing of (Willits). 1890. p. 124.....	A10.5:2
Useful, of the world, descriptive catalogue of (Dodge). 1897....	A11.5:9
Fibers, textile, of Pacific States (Flint). p. 471 .....	A1.1:864
Fibrine and bacteria (Taylor) .....	A18.2:F44
<b>Field, John E.:</b>	
Irrigation from Big Thompson river.....	A10.3:118
Water laws of Colorado. 1899. p. 39.....	A10.3:58
<b>Field and garden, irrigation in (Wickson). 1901 .....</b>	<b>A1.9:138</b>
<b>Field crops:</b>	
Abstracts of reports of agricultural experiment stations on, 1889-1902 .....	A10.6:

	Index
	Classification no.
Field crops—Continued	
Important data as to. 1901. p. 692 .....	A1.10:901
Pacific coast (Jones). 1892. p. 59 .....	A1.8:20
Yield of, in European Russia. 1884. No. 9. p. 37.....	A27.9:22
<i>See also</i> Agricultural products — Crops — Farm products.	
Field cultures of Pacific slope, miscellaneous (Hilgard). p. 79.....	A1.8:20
Field experimentation, plats in, form, size, arrangement, and treat- ment of (Latta). 1896. p. 83.....	A10.3:30
Field experiments, cooperative, report on (Ingersoll). 1891. p. 109 .....	A10.5:3
Same (Voorhees). 1901. p. 116 .....	A10.3:99
Field operations of Division of Soils (Whitney):	
1899 .....	A1.8:64
1900 .....	A26.5:900
1901 .....	A26.5:901
Field parties of Bureau of Soils, Agriculture Department, instruc- tions to, and descriptions of soil types. 1902 .....	A26.2:F45
Field seeds. <i>See</i> Seeds.	
Fifty dairy rules. p. 201.....	A4.1:898
Fig eater, or green June beetle, report on (Howard). 1898. p. 20..	A9.6:10
Figs:	
Cultivation of, and method of preparing for commerce. 1878....	A1.6:4
Culture of. 1897 .....	A20.3:5
Edible, their culture and curing (Eisen). 1897. p. 5 .....	A20.3:5
Gulf States, culture of (Earle). 1897. p. 23 .....	A20.3:5
History, culture, and curing, with descriptive catalogue of known varieties (Eisen). 1901 .....	A20.3:9
Production and importation of, statistics of (Maslin). 1901. p. 288.....	A20.3:9
Smyrna, culture of, in U. S. (Howard). p. 79.....	A1.10:900
<i>See also</i> Caprifig experiments in California.	
Fiji Islands, cotton of, microscopic investigation of (Taylor). 1872. p. 317.....	A27.9:10
<i>See also</i> Australasia.	
Files. <i>See</i> Treasury Department.	
Filled cheese:	
Correspondence defining. 1896.....	A4.4:16
Regulations for, notice of passage of bill for. 1896.....	A4.2:F48
Statistics of, 1886-99 (Pearson). p. 287 .....	A4.1:899
same, 1900 and 1901. (Pearson). p. 398 .....	A4.1:901
Filter-tube method. <i>See</i> Hide-powder.	
Filtration of cane juices and sirups, brown coal and wood char in (Thompson). p. 268 .....	A1.1:887
Same. 1889. p. 99.....	A7.3:17
Finance, farmers' interest in. 1896.....	A27.4:3
Financial transactions with U. S. Department of Agriculture, regula- tions governing. 1894.....	A2.2:F49
Finland, agricultural education and research in (Woll). 1898. pp. 605, 703.....	A10.6:9
Finley, John P. Certain climatic features of two Dakotas. 1893....	A29.2:D14
Finrey, J. R. Lunar halos. 1894. p. 76.....	A29.6:22
Fippin, Elmer O., and Rice, Thomas D. Soil survey of Allegan County, Michigan. p. 93 .....	A26.5:901 <sup>1</sup>
Fir. <i>See</i> White fir.	
Fireman, Peter. <i>See</i> , as abstractor, Morachevski, V.; as translator, Mokrzhetzki, S. — Porchinski, I. — Sibirtzev, N.	
Fires:	
Disinfection of kennels, pens, and yards by (Stiles). 1902. p. 15.	A4.3:35
Drought and; in Northwest. 1871. p. 401 .....	A27.9:9
Forest, losses due to. 1898. p. 16.....	A1.9:79
Great, production of rain by, notes on (Abbe). 1896. p. 461 ...	A29.6:24
<i>See also</i> Forest fires—St. Elmo's fire.	
Fireworm. <i>See</i> Cranberry fireworm.	
Firmeza, Cuba. Rainfall at (Monroe). 1898. p. 252.....	A29.6:26
Fiscal regulations of Agriculture Department .....	A2.2:F52

# Index

Classification no.

Fish, Pierre Augustine:	
"Leeches," a disease of the horse in Florida, histological investigation of two cases of an equine mycosis, with historical account of supposed similar disease, called bursattee, occurring in India. p. 229 .....	A4.1:895-6
<i>See also</i> , as joint author, Moore, Veranus A.	
Fish, Stuyvesant. Address of, before Jefferson Memorial and Interstate Good Roads Convention, Apr., 1902. p. 15 .....	A22.3:25
Fish and Fisheries Commission report, 1871-72, review of. 1873. p. 185 .....	A27.9:11
Fish as food (Langworthy).....	A1.9:85
Fish-culture:	
Directory of departments, boards, societies, colleges, and other organizations, in interest of. 1885 .....	A1.8:39
Improvements and increase in (Green). p. 248 .....	A1.1:872
Letter on (Woodford). 1869. p. 376 * .....	A27.9:7
Progress in, recent. p. 319.....	A1.1:868
Report on (Roosevelt). 1873. p. 183 .....	A27.9:11
<i>See also</i> Pisciculture.	
Fishes:	
Collected by Death Valley Expedition in southern California and Nevada, in 1891, report on, with descriptions of new species (Gilbert). 1893. p. 229.....	A5.5:7
Food, of Alaska. p. 375 .....	A1.1:870
Small, rain of, note on (Abbe). 1901. p. 263.....	A29.6:29
Fisher, A. K.:	
Birds, poisoning, experiments in. p. 423.....	A1.1:887
same, p. 423 .....	A5.1:887
Blackbirds and gophers, depredations of, in northern Iowa and southern Minnesota in fall of 1887. p. 454 .....	A1.1:887
same, p. 454 .....	A5.1:887
Death Valley Expedition of 1891, ornithology of, comprising notes on birds observed in southern California, southern Nevada, and parts of Arizona and Utah. 1893. p. 7.....	A5.5:7
Hawks and owls—	
as related to the farmer. p. 215 .....	A1.10:894
food of. p. 402.....	A1.1:887
same, p. 402 .....	A5.1:887
relation to agriculture in U. S. 1893 .....	A5.3:3
Marsh hawk, report on. p. 370 .....	A1.1:889
same, p. 370 .....	A5.1:889
Owl—	
common screech, report on. p. 372.....	A1.1:889
same, p. 372 .....	A5.1:889
short-eared, special report on. p. 496.....	A1.1:888
same, p. 496 .....	A5.1:888
Sparrow, destruction of, by poisons. 1889. p. 174.....	A5.3:1
Sparrow hawk, special report on. p. 491.....	A1.1:888
same, p. 491 .....	A5.1:888
Woodcock and wood duck, two vanishing game birds. 1901. p. 447 .....	A1.10:901
Fisher, D. Tornado, March 20, 1895, at Augusta, Ga. p. 92 .....	A29.6:23
Fisher, E. M. Hoffmanseggia, North American species of, revision of. 1892. p. 143.....	A6.5:1
Fisher, George, kite used in 1822 by, note on (Abbe). 1897. p. 163 .....	A29.6:25
Fiske, William F. <i>See</i> , as joint author, Weed, Clarence Moores—Scott, W. M.	
Fitch, William R. Hides, injury to, by branding. p. 509.....	A4.1:899
Flad, Henry, Wood preservation. 1887. p. 66 .....	A13.3:1
same, reprint. p. 257.....	A13.3:9
Flagg, William J. <i>See</i> , as joint author, Wilder, Marshall P.	
Flagstaff, Ariz., ice cave at (Renoe). 1901. p. 54.....	A29.6:29
Flammarion, Camille. Juvisy, observatory of, physical and meteorological researches, principally on solar rays, made at station of agricultural climatology at. 1899. pp. 103, 203.....	A10.6:10

\* By a misprint, this page number appears twice.

	<b>Index</b>
	<b>Classification no.</b>
Flat pea, circular relative to (Scribner). 1895.....	A6.4:4
Same (Scribner). 1899 .....	A3.4:1
Flather, J. J. Mechanical drawing in technical schools. 1894. p. 81 .....	A10.3:20
Flavoring extracts, analysis of, provisional methods for (Mitchell). 1902. p. 69 .....	A7.3:65
Flax:	
Appropriation for, 1866, note on. p. 285.....	A27.9:4
Flax-cotton and, special report on. p. 113 .....	A1.1:862
Hemp and, Russia. 1869. p. 237 .....	A27.9:7
Premium crop of. 1870. p. 85.....	A27.9:8
Production and distribution. 1887. p. 438 .....	A27.9:25
Rotation of. 1875. p. 517.....	A27.9:13
Value of, as a farm product. p. 102 .....	A1.1:863
See also Flax culture.	
Flax and Hemp Commission, report of (Moorhead and others). 1865.	A1.2:F76
Flax-cotton:	
Adaptation to cotton machinery (Jackson). p. 405 .....	A1.1:862
Flax and, special report on. p. 113.....	A1.1:862
Flax culture:	
Austro-Hungary (Hawes). 1892. p. 55 .....	A11.5:4
Belgium (Wallace). 1892. p. 47.....	A11.5:4
Europe (Dodge). 1892. p. 11 .....	A27.8:1
same. 2d ed. p. 11.....	A11.5:1
For seed and fiber, in U. S. 1892.....	A11.5:4
same, in U. S. (Dodge). 1895 .....	A1.9:27
same, in Europe and America (Dodge). 1898 .....	A11.5:10
Instructions in (Fryer). p. 92 .....	A1.1:864
Ireland—	
1851-65. No. 7. p. 28 .....	A27.9:3
1860-63. No. 6. p. 21.....	A27.9:1
1851-71. p. 332 .....	A27.9:9
1892. (Wallace) .....	A11.5:4
Northwest, investigation of, in 1891 (Bosse). 1892. p. 40 .....	A11.5:4
Present status of, in U. S. (Dodge). 1897. p. 471.....	A1.10:897
Report on, in U. S. (Dodge). 1892. p. 43.....	A27.8:1
same. 2d ed. p. 43 .....	A11.5:1
Russia. 1892. p. 75.....	A11.5:4
Statistics of, in U. S., for 1889, extracted from 11th Census bulletin no. 177, "Flax and hemp," by John Hyde. 1892. p. 83.	A11.5:4
Success of, of U. S. 1898. p. 5 .....	A1.9:69
Wisconsin and Minnesota (Bosse). 1892. p. 43.....	A11.5:4
Flaxseed. See Crops, principal.	
Flea-beetle living on purslane (Chittenden). 1898. p. 83.....	A9.6:18
See also Horse-radish flea-beetle—Red-legged flea-beetle—Tobacco flea-beetle.	
Fleas, report on (Howard). 1896. p. 9 .....	A9.6:4
See also Hen fleas—Mosquitoes and fleas.	
Fleece. See Goat.	
Fleischmann, Charles L.:	
Ashes, supply of, for agricultural purposes. 1884. No. 9. p. 28.	A27.9:22
[Erroneously printed "Fleischman."]	
Plows and plowing. 1883. No. 64. p. 64 .....	A27.9:21
Fleischmann method. See Van Slyke, L. L.	
Fleming, George. Bovines, contagious pleuro-pneumonia and infectious broncho-pneumonia. p. 87.....	A1.1:891
Same. p. 14 .....	A4.1:891-2
Flesh bases, separation of proteid bodies from, by means of chlorin and bromin (Wiley). 1898. p. 27 .....	A7.3:54
Fletcher, James:	
Address of, as president of Association of Economic Entomologists, at 3d annual meeting. 1891. p. 4 .....	A9.7:4
Canada, insects in, notes on. 1900. p. 94.....	A9.6:26
Chionobas (oeneis) Macounii, preliminary notes upon. 1889. p. 45 .....	A9.7:2
Insects, injurious, of year in Canada, notes upon. 1891. p. 247.	A9.7:3
same. 1892. p. 124 .....	A9.7:5

# Index

	Classification no.
<b>Flies:</b>	
Carriage of disease by (Howard). p. 39.....	A9.6:30
Ridding houses of, device for. 1901. p. 25.....	A1.9:133
<i>See also</i> Aleyrodes citri — Bee-like fly — Bot-fly — Corn syphus-fly — Cyrtoneura caesia — Diptera — Dogwood saw-fly — Gad flies — Gall-fly — Grass and grain joint-worm flies — Grass saw-flies — Hessian fly — Hippelates — Horn fly — House flies — Lestophonus — Man-infecting bot — Ortalid fly — Oscinidae — Ox bot — Ox warble — Peach pest in Bermuda — Phytomyza affinis — Rose saw-flies — Saw-fly — Strawberry saw-fly — Syphus-fly — Tabanidae — Tachinidae — Tulip tree leaf gall-fly — Violet pest — White-fly — Willow-shoot saw-fly.	
Flint, Charles L. Hundred years progress in agriculture. p. 274...	A1.1:872
Flint, Daniel. Hop culture in California. 1900.....	A1.9:115
<b>Flint, Earl:</b>	
Meteorological observations at Rivas, Nicaragua. 1899. pp. 11, 97, 153, 193, 249, 299, 360, 462, 509, 546.....	A29.6:27
Nicaragua, central and western, rainfall in. 1899. p. 587.....	A29.6:27
Rainfall at Rivas, Nicaragua. 1880-98. p. 304.....	A29.6:26
Short biography of (Henry). 1901. p. 67.....	A29.6:29
<b>Flint, Wilson:</b>	
Grape culture in U. S. p. 147.....	A1.1:863
Textile fibers of Pacific States. p. 471.....	A1.1:864
Flood planes of Mississippi River (Ockerson). 1894. p. 81.....	A29.3:11 <sup>1</sup>
<b>Flood service:</b>	
Note on (Hyatt). 1899. p. 50.....	A29.3:24
same (Pindell). 1899. p. 51.....	A29.3:24
River and.....	A29.14:
<b>Floods:</b>	
Basseterre, St. Kitts, W. I., Jan., 1880 (Alexander). p. 196.....	A29.6:27
Brazos River Valley, Tex., 1899, with notes on previous overflows (Cline). p. 295.....	A29.6:27
same, 1900, with report of freshets in other streams. p. 198.....	A29.6:28
Colorado Valley, Texas, April 7 to 17, 1900, and other floods during same period, special report on (Cline). p. 146.....	A29.6:28
Columbia River, 1894. (Abbe). p. 510.....	A29.6:22
Discharge of streams during (Abbe). 1894. p. 255.....	A29.6:22
Flood problems and, of Mississippi River (Frankenfield). 1899. p. 405.....	A29.6:27
Flood warnings and (Frankenfield). 1901. p. 477.....	A1.10:901
Forecasting, methods in use in France (Babinet). 1894. p. 94..	A29.3:11 <sup>1</sup>
<b>Mississippi River—</b>	
report on (Morrill). 1897.....	A29.5:E
same, p. 371.....	A29.1:897
with reference to inundation of alluvial valley (Starling). 1894. p. 68.....	A29.3:11 <sup>1</sup>
Nile, and Indian monsoons, notes on (Abbe). 1900. pp. 252, 324.	A29.6:28
Of year, report on (Garriott). 1899. p. 208.....	A1.1:898
same, p. 27.....	A29.1:898
Predicting, in water courses, best means of finding rules for (Babinet). 1894. p. 142.....	A29.3:11 <sup>1</sup>
<b>River—</b>	
notes on (Abbe). 1897. p. 209.....	A29.6:25
rate of advance of (Abbe). 1895. p. 341.....	A29.6:23
Warnings of, for benefit of transportation companies (Smith). 1899. p. 37.....	A29.3:24
same (Outram). 1899. p. 38.....	A29.3:24
<i>See also</i> Nile floods — River and flood service.	
<b>Flora:</b>	
Arborescent, of U. S., nomenclature of (Sudworth). 1897.....	A13.3:14
Bacterial, of foremilk, relation of cheese-curd inflation to (Bolley). 1896. p. 78.....	A10.3:30
Black Hills of South Dakota (Rydberg). 1896. p. 463.....	A6.5:3
Climate and, notes on (Abbe). 1900. p. 448.....	A29.6:28
Desert, North American, between 32° and 42° north latitude (Parry). 1871. p. 23.....	A27.9:9



Flora—Continued.

Forest—	
of Rocky Mountain region (Sudworth). 1888. p. 153.....	A13.3:2
additions to, of North America, and necessary changes in nomenclature of important timber species (Sudworth). p. 325 .....	A1.1:892
same, p. 325.....	A13.1:892
Japan. 1875. p. 178 .....	A27.9:13
Kansas, southwestern, collection of plants made by C. H. Thomp- son in 1893, report on (Hitchcock). 1896. p. 537 .....	A6.5:3
Nebraska sand hills (Rydberg). 1895. p. 133.....	A6.5:3
Florence, Italy, Congress on parasitic diseases of the vine, Oct., 1886, results of. 1886. p. 119.....	A6.3:2
Florida:	
As home for emigrants (Rollins). 1872. p. 495.....	A27.9:10
Aurora in, note on (Abbe). 1900. p. 294 .....	A29.6:28
Cigar-leaf tobacco in, cultivation of (Floyd). 1899.....	A1.8:62
Citrous fruits in, principal diseases of (Swingle and Webber). 1896.	A28.3:8
Climate and products of (Knapp). 1885. No. 19, p. 23.....	A27.9:23
Climate, soil, productions, and agricultural capabilities—	
1862. (Stickney). p. 59 .....	A1.1:862
1871. p. 160 .....	A1.1:871
1882. (Carse). p. 3.....	A1.8:21
Climatology of, with regard to crops (Mitchell). 1902. p. 208..	A29.3:31
Cold wave in. 1886. p. 23 .....	A27.9:24
Cotton-plant in, insects injurious to (Grote). 1878. p. 351 .....	A9.2:C82
Economic entomology in (Gossard). 1901. p. 178.....	A10.3:99
Farm resources and products of. 1868. p. 81 .....	A27.9:6
Farmers' institute work accomplished in (Stockbridge). 1902. p. 17.....	A10.3:120
Freezes for century and half (Fairbanks). 1895. p. 336.....	A29.6:23
Freezes, two, of 1894-95 in, and what they teach (Webber). 1895. p. 159 .....	A1.10:895
Fruit protection in, notes on (Abbe). 1900. p. 16 .....	A29.6:28
Fruits, tropical and semitropical of (Reasoner). p. 7 .....	A20.3:1
Fruits of, description of (Atwood). p. 140 .....	A1.1:867
Garden crop, insects injurious to (Ashmead). 1887. p. 9 .....	A9.3:14
Hen flea in ( <i>Sarcopsylla gallinacea</i> ), occurrence of (Packard). 1894. p. 23 .....	A9.7:7
Hippelates plague in (Schwarz). 1895. p. 374.....	A9.7:7
Hogs of, common, crossing improved breeds of swine with (Fur- nas). 1895.....	A4.4:4
Horses in, leeches among (Fish). p. 229 .....	A4.1:895-6
Insects in, observations and experimental work (Gossard). 1902. p. 129 .....	A10.3:115
Orange in, diseases of (Underwood). 1891. p. 27.....	A28.5:7
Plants—	
list of new (Holzinger). 1893. p. 288.....	A6.5:1
report on (Simpson). p. 389.....	A1.1:889
same, p. 389 .....	A6.1:889
Road improvement in, progress of (Jennings). 1901. p. 60.....	A22.3:21
Root-knot disease of peach, orange, and other plants in, due to work of <i>anguillula</i> (Neal). 1889.....	A9.3:20
Scale insects of orange in, report on effects of cold upon (Voyle). 1884. p. 70.....	A9.3:4
Sisal hemp in, false (Dodge). 1892. p. 28.....	A11.5:5
same, description of (Baker). 1892. p. 32.....	A11.5:5
Sisal hemp plant in (Dodge). 1891. p. 9.....	A11.5:3
same, investigations, 1893. (Dodge). p. 11.....	A11.5:5
Soil, resources, and means of transportation (Foss). 1882. p. 93.	A1.8:21
Soils and products of (Saunders). 1883 .....	A1.6:62
Soils of, preliminary report on (Whitney). 1898.....	A26.3:13
South, resources and productions of (Robins). 1889. p. 514....	A27.9:27
Southern—	
hesperomys from, new species of, description of (Merriam). 1890. p. 53 .....	A5.5:4
pineapple growing in, note on (Abbe). 1900. p. 253.....	A29.6:28

# Index

	Classification no.
Florida—Continued	
Swine plague in (McGehee). 1880. p. 94 .....	A1.6:22
Water hyacinth, and its relation to navigation in (Webber). 1897. ....	A6.3:18
See also Eustis—Jupiter—Key West—Pensacola.	
Florida beggar weed (Smith). 1899 .....	A3.4:13
Florida clover. See Florida beggar weed.	
Florida "horse-leech." p. 97 .....	A4.1:893-94
Florida land tortoise, insect guests of (Hubbard). 1894. p. 302....	A9.7:6
Flour:	
British imports, 1875-76. p. 486 .....	A27.9:14
Carbohydrates of (Stone). 1896.....	A10.3:34
Imports of, into Great Britain. 1868. p. 39 .....	A27.9:6
Manufacture of (Warder). p. 423 .....	A1.1:862
Minnesota, improved (Buck). p. 388.....	A1.1:875
Prices of, in London. 1868. p. 38 .....	A27.9:6
Shipments of, from Chicago. 1838-63. No. 2, p. 33.....	A27.9:2
Tariff rates on, in European countries. 1894. p. 323 .....	A27.9:32
Typical American composition of. 1897. p. 682.....	A1.10:897
See also Banana flour—Milk flour.	
Flour moth. See Mediterranean flour moth.	
Flowers:	
Cultivated, two dipterous insects injurious to (Coquillett). 1895. ....	A9.7:7
p. 399.....	A27.9:11
Fertilization of (Bennett). 1873. p. 586.....	
See also Begonia—Bulbs—Clematis—Oxeye daisy—Pear flowers—Pinks—Rose—Sunflowers—Violet—Wild flowers.	
Floyd, Marcus L.:	
Bulk fermentation of Connecticut tobacco .....	A26.4:5
Cigar-leaf tobacco, cultivation of, in Florida. 1899.....	A1.8:62
Leaf tobacco, world's exhibit of, at Paris Exposition of 1900. p. 157 .....	A1.10:900
Tobacco experiments conducted in various parts of U. S., results of. p. 455.....	A26.5:900 <sup>1</sup>
See also, as joint author, Whitney, Milton.	
Fluke disease, frogs, toads, and carp as eradicators of (Stiles). p. 220 .....	A4.1:901
Fluke-worms. Trematodes (monotomulum lentis and agamodistomum ophthalmobium) parasitic in the human eye (Stiles). 1902. p. 24 .....	A4.3:35
Flukes and tapeworms of cattle, sheep, and swine, with special reference to inspection of meats (Stiles). 1898. p. 11.....	A4.3:19
Same, compendium of parasites, arranged according to their hosts (Hassall). 1898. p. 137 .....	A4.3:19
Same, bibliography (Hassall). 1898. p. 145.....	A4.3:19
Fluted scale:	
Australis, trip to, to investigate natural enemies of fluted scale, report of (Koebele). 1890 .....	A9.3:21
Australian hymenopterous parasite of (Riley). 1890. p. 248....	A9.7:2
Natural enemies of, report of a trip to Australia to investigate (Koebele). 1890 .....	A9.3:21
See also Scale insects.	
Fly. See Flies.	
Fly weevil. See Angumois grain moth.	
Flynn, T. J., short biography of. 1900. p. 324 .....	A29.6:28
Foaden, George P. Egyptian cotton culture. 1897.....	A10.3:42
Fodder:	
Corn, value of. 1871. p. 470.....	A27.9:9
Cow peas and corn for (Gettys). 1900.....	A3.4:24
Fats in, determination of, by direct weighing and by loss of weight of the substance (Snyder). 1891. p. 37.....	A7.3:31
Forage plants and, exclusive of grass (Smith).....	A3.3:2
Green corn, for milch cows. p. 291.....	A1.1:870
Green materials and, fat in, preliminary report on estimation of (Kilgore). 1897. p. 98.....	A7.3:51
See also Alfalfa—Cattle foods and feeding stuffs—Corn fodder—Corn stover—Cornstalks—Hay—Straw—Stubble.	
Fodder plants and grasses on Potomac flats (Ball). 1900.....	A3.4:28

	<b>Index</b>
	<b>Classification no.</b>
Foëx, G. Grape-mildew, practical treatments for prevention of. 1886. p. 113 .....	A6.3:2
Fog:	
Formation of (Cuthbertson). 1902. p. 125 .....	A29.6:30
New York harbor Dec., 1895 (Abbe). p. 463 .....	A29.6:23
same, 1901 (Abbe). p. 175 .....	A29.6:29
Tule, notes on (Abbe). 1899. p. 547 .....	A29.6:27
Utilization of, note on (Abbe). 1898. p. 466 .....	A29.6:26
same (Abbe). 1899. p. 113 .....	A29.6:27
same (Carpenter). 1899. p. 195 .....	A29.6:27
same, report on (Hawks). 1899. p. 101 .....	A29.6:27
Fog studies:	
Mount Tamalpais (McAdie). pp. 283, 492 .....	A29.6:28
same, pp. 24, 61, 104 .....	A29.6:29
Paper on, read before 2d convention of Weather Bureau officials (McAdie). 1902. p. 31 .....	A29.3:31
Foggy days, records of (Abbe). 1897. p. 249 .....	A29.6:25
Foley, John. Hardwoods, southern, working plan for, and its results. 1901. p. 471 .....	A1.10:901
Foliage, comparative tests with new and old arsenicals on (Marlatt). 1896. p. 30 .....	A9.6:6
Folsetter, Wm. Glanders among horses and mules in Texas. p. 393.	A4.1:889-90
Folsom, California. Locusts near, notes on (Koebele). 1885. p. 308.	A1.1:885
Fonde, Henry. Road improvement. 1902. p. 41 .....	A22.3:23
Food:	
Abstracts of reports of agricultural experiment stations on, 1889-1902 .....	A10.6:
Adulteration of—	
extent and character of (Wedderburn)—	
1890 .....	A7.3:25
1892 .....	A7.3:32
1894 .....	A7.3:41
methods for determination of (Bigelow and Sweetser). 1897. p. 117 .....	A7.3:51
same (Sweetser). 1898. p. 78 .....	A7.3:56
<i>See also</i> Foods and food adulterants.	
Animals slaughtered for, necessity for inspecting (Salmon). 1889. p. 30 .....	A7.3:25
Available energy of (Atwater). 1901. p. 112 .....	A10.3:99
British, supply. 1871. p. 476 .....	A27.9:9
California eggs as, value of (Jaffa). p. 510 .....	A4.1:898
Chemistry and economy of, methods and results of investigations on (Atwater). 1895 .....	A10.3:21
Coloring matter for, provisional methods for analysis of (Tolman). 1902. p. 111 .....	A7.3:65
Consumption of, effect of severe and prolonged muscular work on (Atwater and Sherman). 1901 .....	A10.3:98
Cooking of, suggestions regarding (Atkinson) .....	A1.8:54
Cutting and cooking, for animals (Stewart). p. 396 .....	A1.1:865
Digestibility of, and metabolism of nitrogen, experiments on effect of muscular work upon, conducted at University of Tennessee 1897-1899 (Wait). 1901 .....	A10.3:89
same, 1899-1900 (Wait). 1902 .....	A10.3:117
Dry vegetable, insects affecting (Chittenden). 1896. p. 112 .....	A9.6:4
Examinations of, suggestions for better arrangement of (Dickoré). 1893. p. 162 .....	A7.3:38
Fish as (Langworthy). 1898 .....	A1.9:85
Functions and uses of (Langworthy). 1901 .....	A10.4:46
Hens' eggs as, value of. 1899. p. 24 .....	A1.9:87
Infant and invalid, analysis of, provisional method for (Wiley). 1902. p. 41 .....	A7.3:65
Influence of, on composition of butter (Von Lookren). 1890. p. 141 .....	A7.3:24
Maize as, value of (Wiley). p. 17 .....	A1.8:49
Milk as. 1898 .....	A1.9:74
Mineral, of plants. 1870. p. 40 .....	A27.9:8
Mushrooms as. 1898. p. 18 .....	A1.9:79

# Index

	Classification no.
<b>Food—Continued</b>	
Nestling birds (Judd). 1900. p. 411.....	A1.10:900
Nutrients, food economy and .....	A10.4:43
Nutrients of, heat equivalent of (Strohmman). 1896. p. 590....	A10.6:6
Nutritive value and cost of (Atwater). 1894 .....	A1.9:23
Nutritive value of (Atwater). 1902.....	A1.9:142
Nuts as (Langworthy). 1900. p. 18 .....	A1.9:122
Potatoes as—	
for man. 1898. p. 11 .....	A1.9:84
value of (Langworthy). 1900. p. 337.....	A1.10:900
Preservation of (Loomis). p. 470 .....	A1.1:862
Pure—	
laws of European countries affecting American exports.	
(Bigelow). 1901 .....	A7.3:61
working of law regarding (Beal). 1900. p. 23.....	A1.9:122
Soy beans as, for man (Langworthy). p. 20 .....	A1.9:58
State and other laws relating to beverages and. 1892. p. 87....	A7.3:32
Sugar as (Abel). 1899.....	A1.9:93
<i>See also</i> Beef — Bread — Cattle foods — Cereals — Cheese —	
Chemical analysis, methods of — Cooking — Eggs — Filled	
cheese — Fish — Fishes — Hams — Honey — Human foods —	
Infant and invalid foods — Insect food of crow — Jerked beef —	
Liquor and food adulteration — Macaroni — Meat — Metab-	
olism — Mushrooms — Mutton — Nutrients — Nutrition in-	
vestigations — Nuts — Oleomargarine — Oleomargarine cheese —	
Plant food — Preserved meats — Semolina — Sugar.	
Food and diet (Atwater). 1894. p. 357.....	A1.10:894
Food and diet charts.....	A10.7:
Food and nutrition investigations in New Jersey in 1895 and 1896	
(Voorhees) .....	A10.3:35
Food and nutrition of man, list of publications on.....	A10.2:F73
Food legislation, report on, to Association of Official Agricultural	
Chemists. 1897. p. 105.....	A7.3:51
Food laboratories, suggestions for establishment of, in connection	
with agricultural experiment stations of U. S. (Atkinson).	
1893 .....	A10.3:17
<b>Food materials:</b>	
American, chemical composition of (Atwater and Woods). 1896.	A10.3:28 <sup>1</sup>
same, revised edition (Atwater and Bryant). 1899.....	A10.3:28 <sup>2</sup>
Chinese vegetable, their nutritive and economic value, description	
of (Blasdale). 1899.....	A10.3:68
Common, nutritive value of (Richards). 1893. p. 3.....	A1.8:54
<b>Food preservatives:</b>	
Analysis of, provisional method for (Allen). 1902. p. 107.....	A7.3:65
Commercial, composition of. 1900. p. 743.....	A1.10:900
Use and abuse of (Bigelow). 1900. p. 551.....	A1.10:900
<b>Food products:</b>	
From diseased animals (Salmon). p. 250.....	A4.1:901
North American Indians. p. 404 .....	A1.1:870
Temperatures injurious to, in storage and during transportation	
(Williams) .....	A29.3:13
same, during transportation (Harrington). 1894 .....	A29.2:F94
same (Williams). 1901.....	A1.9:125
<b>Food standards, committee on, of Association of Official Agricultural</b>	
Chemists, report of:	
1898. p. 128 .....	A7.3:56
1899. p. 116 .....	A7.3:57
1900. p. 146 .....	A7.3:62
1901. p. 169 .....	A7.3:67
<b>Foods and feeding stuffs:</b>	
Chemical study of, more thorough, report of committee of Associa-	
tion of Official Agricultural Chemists on ways and means for	
securing. 1890. p. 117.....	A7.3:28
Outline of work on, for 1901 (Krug). 1901.....	A7.4:7
<b>Foods and food adulterants.</b> Pts. 1-10.....	A7.3:13
<b>Foods and food control</b> (Bigelow). 1902 .....	A7.3:69

	<b>Index</b>
	<b>Classification no.</b>
Foot, diseases of, among cattle (Trumbower). p. 349 .....	A4.2:C29 <sup>2</sup>
Same, among horses (Holcombe), p. 357 .....	A4.2:H78
Foot-and-mouth disease, or apthous fever:	
Causes and symptoms of, and measures against. p. 585 .....	A1.1:880
same, p. 282 .....	A1.6:34
Europe. 1869. p. 385 * .....	A27.9:7
Instructions concerning inspection of live stock for. 1902 .....	A4.2:F73
Nonexistence of, in the west (McLean). 1881. p. 319 .....	A1.6:34
Report on, 1881 (Lyman). p. 33 .....	A1.1:881-2
Treatment for (Pearne). 1873. p. 450 .....	A27.9:11
Warning to all owners of cattle, sheep, and swine (Salmon). 1902 .....	A4.4:38
<i>See also</i> Aphthæ.	
Forage:	
Common crops for, value of. 1897. p. 5 .....	A1.9:65
French mode of curing. p. 397 .....	A1.1:875
Succulent, for farm and dairy (Williams). 1899. p. 613 .....	A1.10:899
Forage conditions:	
Eastern Rocky Mountain region (Williams). 1898 .....	A3.3:12
Northern border of Great Basin (Griffiths). 1902 .....	A19.3:15
Prairie regions (Smith). 1895. p. 309 .....	A1.10:895
Forage crops:	
Cultivated, of Northwestern States (Hitchcock). 1902 .....	A19.3:31
Leguminous (Smith). 1897. p. 487 .....	A1.10:897
Range improvement and, progress of experiments in, at Abilene, Tex. (Bentley). 1899 .....	A3.4:23
Seed of, plan for distributing, etc. 1902 .....	A19.2:F74
Sorghum as a (Williams). 1897 .....	A1.9:50
Soy bean as a (Williams) .....	A1.9:58
Winter, for South (Ball). 1902 .....	A1.9:147
<i>See also</i> Pigs—Soy bean—Velvet bean.	
Forage plants:	
Agricultural grasses and, of U. S., and such foreign kinds as have been introduced (Vasey) .....	A1.8:32
Arizona and New Mexico, notes on (Pool). 1888. p. 48 .....	A6.3:6
Collected in Russia by M. A. Carleton, for section of seed and plant introduction, Agriculture Department. 1899 .....	A6.6:4
Cultivation on alkali soils (Smith). 1898. p. 535 .....	A1.10:898
Experiments with range grass and, at Highmore, S. Dak., report of progress (Scribner). 1899 .....	A3.4:21
same (Scribner). 1901 .....	A3.4:33
Forage resources and, of Gulf States (Tracy). 1898 .....	A3.3:15
Of secondary or undetermined importance for Southern States, and composition of forage plants grown in South (Tracy). 1896. p. 91 .....	A10.6:6
Ontario, experiments with (Kennedy). 1899 .....	A3.4:20
Semiarid West (Georgeson). 1893. p. 145 .....	A10.3:16
South (Tracy). 1894 .....	A1.9:18
Southern (Scribner). 1899 .....	A1.9:102
Western Texas, investigation of (Nealley). 1888. p. 30 .....	A6.3:6
<i>See also</i> Alfalfa—Berseem—Commercial saltbushes—Corn—Corn plant—Cowpeas—Crimson clover—Fodder—Grass—Grasses and forage plants—Kafir corn—Maize—Millets—Rape—Salt- bushes—Sorghum—Soy bean—Velvet bean—Vetches.	
Forage resources, Red Desert of Wyoming (Nelson). 1898 .....	A3.3:13
Forbes, Robert H.:	
Range improvement and administration. 1902. p. 85 .....	A10.3:115
Tanning extracts, preparation of, for analysis. 1897. p. 149 .....	A7.3:51
Forbes, S. A.:	
Address as first vice-president Association of Economic Ento- mologists, at 4th annual meeting, 1892. p. 68 .....	A9.7:5
Address as president of Association of Economic Entomologists, at 5th annual meeting, 1893. p. 61 .....	A9.7:6
Arsenical poisons for plum and peach curculio. 1889. p. 3 .....	A9.7:2

\* By a misprint, this page number appears twice.

# Index

	Classification no.
Forbes, S. A.—Continued	
Chinch bugs—	
early occurrence of, in Mississippi Valley. 1889. p. 249.....	A9.7:1
experiments on. 1883. p. 23 .....	A9.3:2
Corn-root aphid, summary history of. 1891. p. 233 .....	A9.7:3
Entomology, office and laboratory organization. 1889. p. 185 ..	A9.7:2
Hessian fly parasite, importation of, from Europe. 1891. p. 179.	A9.7:4
Nursery inspection and orchard insecticide work in Illinois. 1901.	
p. 172 .....	A10.3:99
White grubs, life history of. 1891. p. 239 .....	A9.7:3
Forbush, Edward H.:	
Gipsy moth, recent work against. 1898. p. 78.....	A9.6:17
same. 1899. p. 104 .....	A9.6:20
Hairy caterpillars, destruction of, by birds. 1899. p. 85.....	A9.6:20
Forecasting floods, methods in use in France (Babinet). 1894. p. 94.	A29.3:11 <sup>1</sup>
Forecasting for rivers of small drainage area, especially those of	
North Carolina (Herrmann). 1902. p. 158 .....	A29.3:31
Forecasts. <i>See</i> Weather forecasts.	
Ford, Milton. Fruit culture, paper on. 1883. p. 221 .....	A1.7:2
Ford, Seabury. Drought, great, of 1845, in northern Ohio. p. 293 ..	A29.6:23
Ford, T. S. Hog cholera, communication of, by carrion crows.	
p. 325 .....	A4.1:895-6
Foreign agricultural experiment stations. <i>See</i> Agricultural experi-	
ment stations.	
Foreign agriculture, notes on, monthly .....	A27.9:
Foreign cities:	
Disposition of dead animals in. p. 346.....	A4.1:899
Dressed poultry in (Ashby). p. 330 .....	A4.1:899
Foreign countries:	
Agricultural experiment stations in (True and Crosby). 1902 ...	A10.3:112
Agricultural statistics of, official. 1892. p. 79.....	A27.9:30
Contagious diseases among domesticated animals in, consular	
reports on. p. 343.....	A4.1:891-2
Contagious diseases of animals in, report on. 1899. p. 479.....	A4.1:899
same. 1900 (Thompson). p. 492 .....	A4.1:900
Cows and cattle of (Pearson). 1896. p. 38.....	A4.3:11
Horse trade of U. S. with. p. 600 .....	A4.1:901
Irrigation systems of. p. 275 .....	A1.1:871
Live stock in, statistics of. 1886. p. 25 .....	A27.9:24
same. 1899. p. 442 .....	A4.1:899
Regulations of, regarding importation of American plants, trees,	
and fruits (Howard). 1900.....	A9.5:41
Foreign exchanges, system of, report on. p. 530.....	A1.1:868
<i>See also</i> Agricultural societies, foreign.	
Foreign markets:	
Eggs and poultry. p. 321 .....	A4.1:899
Monthly prices from, Jan., 1873-Dec., 1876.....	A27.9:
Testimony before Industrial Commission relative to, for Amer-	
ican agricultural products (Hitchcock). 1901 .....	A1.8:67
Foreign Markets Division, Agriculture Department [formerly For-	
eign Markets Section]:	A12.
Work of for farmer (Hitchcock). 1897. p. 270.....	A1.10:897
Foreign trade. <i>See</i> Trade.	
Foremilk, bacterial flora of, relation of cheese-curd inflation to	
(Bolley). 1896. p. 78.....	A10.3:30
Forest experiment stations in connection with agricultural colleges,	
paper on (Egleston). 1885. p. 153 .....	A1.7:9
Forest fires:	
Connection of railroads with (Egleston). 1887. p. 128.....	A13.3:1
Is protection against, practicable? (Fernow) .....	A13.4:14
Legislation regarding, in U. S. (Fernow).....	A13.4:13
Smoke from (Abbe). 1894. p. 329.....	A29.6:22
Forest lands:	
Practical assistance to farmers, lumbermen, and others in handling	
(Pinchot). 1898 .....	A13.4:21
Working plan, near Pine Bluff, Ark. (Olmsted). 1902.....	A13.3:32



Forest nursery, collection of tree seeds and propagation of seedlings (Sudworth). 1900.....	A13.3:29
Forest Park meteorological observatory. See St. Louis, Mo.	
Forest reserves:	
Grazing in (Roth). 1901. p. 333 .....	A1.10:901
Proposed, in southern Appalachian, present condition of movement for, memorial, reports, and extracts from press. p. 155..	A1.2:Ap4 <sup>2</sup>
Legislation, recent, on State forestry commissions and.....	A13.4:17
Names, locations, areas, etc. 1899. p. 755.....	A1.10:899
Forest school. See Aschaffenburg, Bavaria.	
Forest trees:	
Brief instructions on seed sowing and. 1873.....	A1.2:Se3 <sup>8</sup>
Catalogue of, of U. S., which usually attain height of 16 feet or more, with notes and brief descriptions of more important species (Vasey). 1876 .....	A1.8:11
Check list of, of U. S. (Sudworth). 1898 .....	A13.3:17
Culture and management of (Thomas). p. 43 .....	A1.1:864
Culture of (Vasey). 1872. p. 381.....	A27.9:10
Dakota, culture in (Smith). 1891. p. 50 .....	A13.3:5
Evergreen and other, causes of destruction of in northern New England, additions to third report on. 1886. p. 17 .....	A9.3:12
Fungous diseases of (Schrenk). 1900. p. 199.....	A1.10:900
Insects of—	
notes on (Packard). 1882. p. 24 .....	A9.3:3
observations on, New York State (Felt). 1902. p. 63 .....	A9.6:31
study of (Hopkins). 1895. p. 75 .....	A9.6:2
Insects injurious to, report on (Packard)—	
1886. p. 20 .....	A9.3:13
1890 .....	A8.1:4
1893. p. 53 .....	A9.3:32
Kansas, experiments in (Vasey). 1872. p. 506.....	A27.9:10
Native and naturalized, of U. S., catalogue of (Vasey). p. 151...	A1.1:875
North American, distribution of. 1884.....	A1.7:5
same (Vasey). 1884. p. 38.....	A1.7:5
Planting of, in Spain. 1876. p. 263 .....	A27.9:14
San Francisco mountain region, Arizona (Merriam). 1890. p. 119.....	A5.5:3
Young, oviposition in, by <i>Tetraopes femoratus</i> , fab. (Gillette). 1897. p. 76 .....	A9.6:9
Forest work, States having offices for, list of—	
1898. p. 620 .....	A1.10:898
1899. p. 702 .....	A1.10:899
1900. p. 655 .....	A1.10:900
1901. p. 630 .....	A1.10:901
Forest working plan for Township 40, Totten and Crossfield purchase, Hamilton Co., N. Y., State forest preserve (Hosmer and Bruce). 1901 .....	A13.3:30
Forestation, re-, and rainfall in Leeward Islands (Alexander). 1901. p. 254 .....	A29.6:29
Forestry:	
Abstracts of reports of agricultural experiment stations on. 1889-1902.....	A10.6:
Conditions and interests of Wisconsin (Roth). 1898.....	A13.3:16
same, introduction to report. 1898. p. 7 .....	A13.3:16
Educational men, circular to, relative to forestry. 1886 .....	A13.4:1
same, 1887 .....	A13.4:2
For farmers (Fernow). 1898.....	A1.9:67
same, pts. 1-4. p. 461.....	A1.10:894
same, pt. 5. p. 333 .....	A1.10:895
Influence of, on rainfall. 1876. p. 103 .....	A27.9:14
Investigation, progress of (Hough). p. 653 .....	A1.1:880
List of publications relating to, in Agriculture Department library. 1898 .....	A17.3:24
Mississippi Valley, preliminary report on (Baker). 1883.....	A1.8:28
Ohio and Indiana, certain portions of (Furnas). 1884. p. 346...	A13.5:4
Ontario, address on (Phipps). 1884. p. 43 .....	A1.7:5
Paper on (Baker). 1883. p. 181.....	A1.7:2

# Index

	Classification no.
<b>Forestry—Continued</b>	
<b>Practical—</b>	
in the Adirondacks (Graves). 1899 .....	A13.3:26
in southern Appalachians (Price). 1900. p. 357 .....	A1.10:900
Practice of, by private owners (Graves). 1899. p. 415.....	A1.10:899
Primer of, pt. 1 (Pinchot).....	A13.3:24
Problems in, notes on some (Pinchot). 1898. p. 181.....	A1.10:898
<b>Progress in—</b>	
1899. p. 752 .....	A1.10:899
1900. p. 733 .....	A1.10:900
1901. p. 666 .....	A1.10:901
Progress of, in U. S. (Pinchot). 1899. p. 293.....	A1.10:899
Relation of railroads to forest supplies and (Kern). 1887. p. 11.	A13.3:1
Reports on, vols. 1-3 (Hough); vol. 4 (Egleston) .....	A13.5:
<b>Schools of, list of—</b>	
1899. p. 703 .....	A1.10:899
1900. p. 656 .....	A1.10:900
1901. p. 631 .....	A1.10:901
Statistics of. p. 244.....	A1.1:875
Trees important in. 1897. p. 645 .....	A1.10:897
United States, address on, before American Forestry Congress, St. Paul, Aug. 8, 1883 (Loring) .....	A1.7:1
Western States and Territories. p. 515.....	A1.1:878
What is forestry? (Fernow). 1891.....	A13.3:5
Forestry, American Association of. <i>See</i> American Forestry Associa- tion.	
Forestry, Belgian Exposition of Agriculture and. <i>See</i> Belgian.	
Forestry, first international congress of agriculture and, 1893. <i>See</i> Vienna.	
Forestry associations, list of, with officers—	
1898. p. 620 .....	A1.10:898
1899. p. 702 .....	A1.10:899
1900. p. 655 .....	A1.10:900
1901. p. 631 .....	A1.10:901
Forestry Bureau, Agriculture Department [formerly Division of Forestry].....	A13:
Forestry commissions, State and forest reserves, recent legislation on.	A13.4:17
Forestry Division, Agriculture Department, work of, for the farmer (Fernow). 1897. p. 143.....	A1.10:897
Same (Pinchot). 1898. p. 297.....	A1.10:898
Forestry Exhibition, International, 1884. <i>See</i> Edinburgh, Scotland.	
<b>Forests:</b>	
American, their destruction and preservation (Starr). p. 210....	A1.1:865
Area in, percentage of, 1866. p. 385 .....	A27.9:4
Austrian coast provinces, culture in. 1873. p. 141.....	A27.9:12
Cascade Mountains of Oregon, growth and sheep grazing in (Co- ville) .....	A13.3:15
Clearing and cultivation, effect of, upon water supply and soil, rainfall, temperature (Fulton). 1899. p. 89 .....	A29.3:24
same (Salisbury). 1899. p. 91 .....	A29.3:24
Crop, measuring (Mlodziansky). 1898.....	A13.3:20
<b>Culture—</b>	
extent and value of, etc. p. 226 .....	A1.1:870
incentive to. 1869. p. 145.....	A27.9:7
Damage to, by destructive pine bark-beetle (Hopkins). 1893. p. 187 .....	A9.7:5
Entomology of, study of, in America (Hopkins). 1902. p. 5....	A9.6:37
Europe, preservation in. 1875. p. 242 .....	A27.9:13
Extension in Middle West (Hall). 1900. p. 145.....	A1.10:900
Fires in. <i>See</i> Forest fires.	
<b>Flora of—</b>	
additions to, of North America and necessary changes in nomenclature of important timber species, with notes (Sud- worth). p. 325.....	A1.1:892
same, p. 325 .....	A13.1:892
Rocky Mountain region (Sudworth). 1888. p. 153.....	A13.3:2

**Forests—Continued**

Forest conditions and, of southern Appalachian Mountain region (Wilson). p. 13.....	A1.2:Ap4 <sup>1</sup>
same (Ayres and Ashe). p. 45.....	A1.2:Ap4 <sup>2</sup>
France, culture in. 1873. p. 147.....	A27.9:12
Germany, area of. 1876. p. 282.....	A27.9:14
Government in its relation to (James). 1888. p. 23.....	A13.3:2
Growth and timber consumption, letter to Secretary of Agriculture regarding (Fernow). 1893.....	A13.2:F76
Headwaters of streams, preservation of (Read). 1884. p. 27....	A1.7:5
Influence of—	
introduction and summary of conclusions to reports on (Fernow). 1893. p. 9.....	A13.3:7
upon rainfall (McMurtrie). 1874. p. 432.....	A27.9:12
on water supplies (Fernow). p. 297.....	A13.1:889
Insects injurious to, descriptions of larvæ of. 1883. p. 251.....	A8.1:3
Insect enemies of, in Northwest, preliminary report on (Hopkins). 1899. p. 21.....	A9.6:21
Management in other countries (Phipps). 1883. p. 19.....	A1.7:1
Management of, more rational, suggestions in behalf of (Fernow). 1893. p. 23.....	A13.4:10
Meteorological observations, review of, a study preliminary to discussion of relation of forests to climate (Harrington). 1893. p. 23.....	A13.3:7
New Hampshire and West Virginia, condition of (Hough). 1884. p. 348.....	A13.5:4
Paper on (Edmunds). 1869. p. 22.....	A27.9:7
Plains, cultivation on, general discussion of (Blodget). p. 316...	A1.1:872
Porto Rico, conditions of (Hill). 1899.....	A13.3:25
Precipitation and its bearing on theories of forest influences (Abbe). 1893. p. 175.....	A13.3:7
Products of, used for constructing material, insects detrimental and destructive to (Hopkins). 1902. p. 60.....	A9.6:31
Public lands and. 1872. p. 65.....	A27.9:10
Rainfall and, relation of, in West India Islands (Hubbard). 1873. p. 117.....	A27.9:11
Rainfall and, report on (Hazen). 1897. p. 395.....	A29.6:25
Relation of—	
to farms (Fernow). 1895. p. 333.....	A1.10:895
same, p. 43.....	A1.9:67
to water supplies (Fernow). 1893. p. 123.....	A13.3:7
Resources of U. S., facts and figures regarding, briefly stated (Fernow). 1896.....	A13.4:11
Rocky Mountain, introduction to reports on condition of (Fernow). 1888. p. 7.....	A13.3:2
Rocky Mountains, conditions of, especially in Colorado, Idaho, Montana, Wyoming, and New Mexico (Ensign). 1888. p. 41.	A13.3:2
Sanitary significance of (Fernow). 1893. p. 171.....	A13.3:7
Snowfall and, note on (Abbe). 1899. p. 18.....	A29.6:27
Southern and western States, condition in (Baker). 1884. p. 105.	A13.5:4
States, condition of (Baker). 1884. p. 181.....	A13.5:4
Students of, prospective, suggestions to (Pinchot). 1902.....	A13.4:23
Supplies of—	
consumption of, by railroads and practicable economy in their use. 1890. p. 13.....	A13.3:4
relation of railroads to forestry and (Kern). 1887. p. 11...	A13.3:1
Washington Territory (Brown). 1884. p. 388.....	A13.5:4
Western States and Territories, condition of (Furnas). 1884. pp. 246, 255.....	A13.5:4
Yellowstone National Park, letter relative to, needs of (Hague). p. 206.....	A13.3:2
<i>See also</i> Appalachian forests — Evergreen forests — Forest trees.	
Fort Collins, Colo. Evaporation at (Abbe). 1897. p. 210.....	A29.6:25
Fort Lyon, Colo. Artesian well near (White and Aughey). p. 26..	A1.1:881-2
Fort Scott, Kansas:	
Sorghum sugar experiments at, in 1887—	
(Swenson). p. 213.....	A1.1:887
same, p. 5.....	A7.3:17

# Index

	Classification no.
<b>Fort Scott, Kansas—Continued</b>	
Sorghum sugar experiments at, in 1887—Continued	
(Crampton and Fake). p. 221 .....	A1.1:887
same, p. 5 .....	A7.3:18
same, p. 15 .....	A7.3:17
(Parkinson). p. 226 .....	A1.1:887
same, p. 26 .....	A7.3:17
Sugar, manufacture of, from sorghum and sugar canes, in 1886, ex- periments at (Wiley) .....	A7.3:14
<b>Fort Smith, Ark. Tornado of Jan. 12, 1898, at (O'Donnell). p. 18.</b>	A29.6:26
<b>Fort Worth, Texas:</b>	
Feeding station at, regulations concerning cattle transportation—	
Jan. 3, 1898 .....	A4.5:15
Jan. 9, 1899 .....	A4.5:31
Jan. 20, 1900 .....	A4.5:57
Interstate convention of cattlemen held, Mar. 11-13, 1890, pro- ceedings of. 1890 .....	A4.2:C29 <sup>1</sup>
<b>Fortier, Samuel:</b>	
Gallatin Valley, Mont., duty of water in. 1900. p. 175 .....	A10.3:86
Irrigation investigations in Montana. 1900. p. 267 .....	A10.3:104
same. 1901. p. 225 .....	A10.3:119
<b>Foss, James H. Florida, soil, resources, and means of transporta-     tion. 1882. p. 93 .....</b>	A1.8:21
<b>Fossil fungi, notes on (James). 1891. p. 268 .....</b>	A28.5:7
<b>Foster, John W. Coffee, cultivation of, in Mexico. 1876. p. 268 ..</b>	A27.9:14
<b>Foul brood, laws relative to, with recent laws against injurious in-     sects in North America (Howard). 1898 .....</b>	A9.6:13
<b>Fowl cholera:</b>	
Bacillus obtained from three outbreaks of, study of (Moore). 1895. p. 63 .....	A4.3:8
Investigation of (Salmon)—	
1880. p. 13 .....	A1.6:34
same, p. 387 .....	A1.1:880
1881. p. 258 .....	A1.1:881-2
1883. p. 44 .....	A1.1:883
Prevention of (Salmon). 1881. p. 314 .....	A1.6:34
same. (Circular.) Feb. 23, 1881 .....	A4.2:F82
<i>See also</i> Chicken cholera—Leukæmia.	
<b>Fowl diseases. <i>See</i> Asthenia—Chicken cholera—Diphtheria—     Enterohepatitis—Fowl cholera—Gape disease of chickens—     Leukæmia.</b>	
<b>Fowls:</b>	
American breeds of (McGrew). p. 513 .....	A4.1:901
Asthenia in (Dawson). p. 329 .....	A4.1:898
Care and feeding (Watson). 1896 .....	A1.9:41
Diphtheria in, preliminary investigation of (Moore). 1895. p. 39 ..	A4.3:8
Diseases of, correspondence relating to. 1877. p. 492 .....	A1.1:877
same. 1898. p. 547 .....	A4.1:898
Domestic, internal parasites in, microscopic observations (Taylor). 1884 .....	A1.8:34
Gape disease of. p. 550 .....	A1.1:885
same, p. 274 .....	A4.1:885
Gape disease of, and parasite by which it is caused (Meguin). p. 269 .....	A1.1:884
same, p. 281 .....	A4.1:884
same. 1884. p. 103 .....	A4.2:An5
Infectious leukæmia in, bacterial disease frequently mistaken for fowl cholera (Moore). p. 185 .....	A4.1:895-6
Management and profit of. p. 329 .....	A1.1:870
Missouri industry, and annual loss by disease (Bradley). p. 418 ..	A4.1:885
Nodular tæniasis in (Moore). 1895 .....	A4.4:3
<i>See also</i> Chickens—Ducks—Geese—Hens—Plymouth Rock— Poultry—Shrikes—Turkeys.	
<b>Fox, Charles P. <i>See</i>, as joint author, Schweitzer, Paul.</b>	
<b>Fox, William F. Lumber industry of State of New York, history     of. 1902 .....</b>	A13.3:34
<b>Fox Indian Agency. <i>See</i> Sac and Fox Indian Agency.</b>	

**France:**

Agricultural botany, review of publications on, issued in, during 1896 (Gain). 1897. pp. 841, 940.....	A10.6:8
Agricultural education in (Smith). 1900. p. 115.....	A1.10:900
Agricultural industry of. 1866. p. 428 .....	A27.9:4
Agricultural prizes in. 1884. No. 9. p. 44.....	A27.9:22
Agricultural publications of, notes from recent. p. 626.....	A1.1:869
Agricultural schools of. 1874. p. 212 .....	A27.9:12
Agricultural syndicates of. 1889. p. 523.....	A27.9:27
same, 1890. p. 577 .....	A27.9:28
Agricultural wages in. 1876. p. 421.....	A27.9:14
Agriculture in—	
1874. p. 131 .....	A27.9:13
1875. pp. 243, 516.....	A27.9:13
1875. p. 115 .....	A27.9:14
1867-1876. p. 419 .....	A27.9:14
1893. p. 4 .....	A27.9:31
Agronomic Institute of. 1876. p. 490 .....	A27.9:14
Balloon ascensions on Mar. 24, 1899, in (Bigelow). p. 197 .....	A29.6:27
Beet sugar in, progress of manufacture of. 1866. p. 179 .....	A27.9:4
Cheese making in, at high altitudes. 1875. p. 127.....	A27.9:13
Farm products of. 1874. p. 392 .....	A27.9:13
Farmers of, circular offering aid to (Capron). 1871. p. 65.....	A27.9:9
Flood forecasting in, methods in use (Babinet). 1894. p. 94 ...	A29.3:11 <sup>1</sup>
Forage curing in, mode of. p. 397.....	A1.1:875
Forest culture in. 1873. p. 147.....	A27.9:12
Grape vine, cultivation in (Bossert). p. 156 .....	A1.1:863
Grape vine in, black rot of (Frechou). 1890. p. 88.....	A6.3:11
Grape vine in, downy mildew of, treatment of, in 1887 (Chauzit). 1888. p. 75 .....	A6.3:5
same, 1888 (Prillieux). 1889. p. 49.....	A6.3:10
Hemp industry in (Dodge). 1892. p. 27 .....	A27.8:1
same, 2d edition. p. 27.....	A11.5:1
Hog cholera in. p. 163 .....	A4.1:887-8
same. p. 172.....	A1.1:888
Horses in (Green). 1898. p. 39 .....	A1.2:H78
Irrigation in. 1891. p. 278.....	A15.2:P94 <sup>1</sup>
Kite in, note on (Abbe). 1897. p. 490.....	A29.6:25
Land in, distribution of. 1888. p. 476 .....	A27.9:26
Live stock in, movement of. 1865-67. p. 380.....	A27.9:5
Markets for American products in. 1895.....	A12.3:3
Meteorology in, notes on (Abbe). 1898. p. 553 .....	A29.6:26
Oleomargarine in (Tourgée). p. 513.....	A4.1:900
Pork, salted, of American origin, importation of (Bouley). 1884. p. 186 .....	A4.3:30
Poultry raising in. 1873. p. 365.....	A27.9:11
Ramie question in, botanical consideration of. 1892. p. 97.....	A27.8:1
same, 2d edition. p. 97.....	A11.5:1
Sands, drifting, experiments in fixing. 1875. p. 520.....	A27.9:13
Sugar beet, culture of, and manufacture of sugar therefrom (McMurtrie). 1880.....	A1.6:28
Sugar-beet culture in, notes on (Maxwell). 1890. p. 81.....	A7.3:30
Tannery refuse in, utilization of. 1876. p. 280.....	A27.9:14
Tariff and reciprocity treaties. 1892. p. 181.....	A27.9:30
Vine disease in (Price). 1873. p. 172.....	A27.9:11
Wine in, production of, 1883. No. 9. p. 45.....	A27.9:22
Wine poisoning in. 1876. p. 487 .....	A27.9:14
<i>See also</i> Clermont-Ferrand—Guadalupe Island, Oceanica—Havre—Indo-China—Juvisy—Martinique—Mauritius—Nîmes—Roubaix—Trappes.	
<b>Francis, Frederick L.</b> <i>See</i> , as joint author, Randolph, Frederick J.	
<b>Frankenfield, Harry Crawford:</b>	
Atmospheric pressure, high and low, monthly report on, Dec., 1899-Apr., 1900, June-Dec., 1900, Oct. and Nov., 1901.....	A29.6:
Daily river stages on principal rivers of U. S., 1896-99 .....	A29.10:6
Floods and flood warnings. 1901. p. 477 .....	A1.10:901
Mississippi river, floods and flood problems of. 1899. p. 405 ...	A29.6:27

# Index

	Classification no.
Frankenfield, Harry Crawford—Continued	
River and flood service, monthly notes on, Sept., 1898–Oct., 1902.	A29.6:
Temperature, humidity, and wind direction, vertical gradients, preliminary report on kite observations. 1898 .....	A29.5:F
Tornado of May 27, 1896, at St. Louis, Mo. p. 77 .....	A29.6:24
Weather forecasts in State of Missouri. 1895. p. 292 .....	A29.6:23
Frankfort-on-the-Main, Germany. Cost of hauling farm products over wagon roads at (Mason). p. 5 .....	A22.4:27
Frankland, W. Ashby. See, as joint author, Stiles, Ch. Wardell.	
Franklin, George E.:	
California, southern, weathercrop bulletin, history of. 1896. p. 46.	A29.3:18
Weather Bureau stations, should compensation be allowed persons not in employ of Bureau, while learning station duties, to enable them to properly perform such duties in cases of emergency? 1899. p. 127 .....	A29.3:24
Franklin Kite Club, Philadelphia, notes on (Abbe). 1896. pp. 334, 416.	A29.6:24
Same (Abbe). 1897. pp. 162, 165 .....	A29.6:25
Franklinville, N. Y.:	
Explosive noises at (Kales). 1897. p. 393 .....	A29.6:25
Thunder storms in (Kales). 1897. p. 309 .....	A29.6:25
Franz Josef Land:	
Auroral observations on 2d Wellmann expedition made in neighborhood of, 1898–99 (Baldwin). p. 107 .....	A29.6:29
Meteorological work in, 1898–99, outline of scope and character of (Baldwin). 1901. p. 351 .....	A29.1:900
Fraps, G. S.:	
Pentosan-free crude fiber, determination of. 1902. p. 51 .....	A7.3:67
Pentosans and crude fiber, determination of, notes on. 1901. p. 112 .....	A7.3:62
Sulphur, loss of, in preparing ash of plants. 1901. p. 98 .....	A7.3:62
See also, as joint author, Withers, W. A.	
Frear, William:	
Abstract committee of Association of Official Agricultural Chemists, report of. 1893. p. 148 .....	A7.3:38
same. 1894. p. 211 .....	A7.3:43
Address of, as president of Association of Official Agricultural Chemists, at 14th annual convention. 1897. p. 7 .....	A7.3:51
Vinegar, analysis of, provisional method for. 1902. p. 62 .....	A7.3:65
Wheat varieties, extension of tests applied to. 1890. p. 131 .....	A10.5:2
Frear, William, and McDonnell, Henry Barnett. Phosphoric acid, available, determination of, comparison of Wagner's and present association method for. 1886. p. 26 .....	A7.3:12
Frechou, ——. Grapevines, black rot of, in France. 1890. p. 88.	A6.3:11
Fredericksen, J. D. Sugar beet, introduction of, and manufacture of beet sugar in the Northwest as compared with countries of Europe. 1879. p. 275 .....	A1.6:28
Freedmen, improvident habits of. 1873. p. 39 .....	A27.9:11
Freedmen's labor, notes on. 1866. p. 346 .....	A27.9:4
Same. 1870. p. 9 .....	A27.9:8
Freezes. See Florida — Frosts.	
Freight rates:	
Domestic and trans-Atlantic, monthly, Aug., 1893–Dec., 1895.....	A27.9:
Ocean transportation of products of agriculture, Oct. 1, 1895–Oct. 1, 1896.....	A27.8:12
Railroad, from Chicago. 1866. p. 27 .....	A27.9:4
Road materials and, in certain States north of Ohio River, information regarding. 1894.....	A22.3:6
same, in Eastern and Southern States. 1894 .....	A22.3:7
Statistics of. 1895. p. 553 .....	A1.10:895
same. 1896. p. 597 .....	A1.10:896
Transportation companies, monthly notes on, Aug., 1882–July, 1893.....	A27.9:
See also Transportation rates.	
French, Henry F.:	
Agricultural colleges, historical sketch of. p. 137 .....	A1.1:865
Country roads, description of formation of. p. 538 .....	A1.1:866



	<b>Index</b>
	<b>Classification no.</b>
French, Hiram T.:	
Feeding sheaf wheat to hogs. p. 494.....	A4.1:898
Hog raising in the Northwest. 1900. p. 16.....	A1.9:117
Sheaf wheat, feeding to steers. p. 486.....	A4.1:898
Wheat in sheaf and chopped wheat for pigs. p. 494.....	A4.1:898
“French Napoleon,” stallion, account of. p. 320.....	A1.1:866
Fresno, Cal., soil survey around (Means and Holmes). p. 333.....	A26.5:900 <sup>1</sup>
Friend, Charles W.:	
Earthquakes at Carson City, Nevada, 1875-98. p. 64.....	A29.6:28
Seismograph at observatory at Carson City, Nev. 1900. p. 245.....	A29.6:28
Frisby, Almah J., and Bryant, Arthur Peyton. Potato, composition of different parts of, and loss of nutrients during process of boiling. 1897. p. 25.....	A10.3:43
Frissell, H. B. Negroes, dietary studies among, in eastern Virginia, in 1897. 1899. p. 7.....	A10.3:70
Froelich, Louis. Grape, scuppernong, letter on. 1868. p. 449.....	A27.9:6
Frogs as an eradicator of fluke disease (Stiles). p. 220.....	A4.1:901
Frost:	
August, 1863. No. 4. p. 33.....	A27.9:1
California (Hilgard). 1896. p. 166.....	A29.6:24
California, southern, prediction and prevention (Abbe). 1895. pp. 341, 464.....	A29.6:23
Destructive, of June 30, 1899, in Ohio, notes on (Abbe). p. 311.....	A29.6:27
Fighting of (McAdie)—	
1899. p. 111.....	A29.3:24
1900.....	A29.3:29
1901.....	A29.6:29
Formation of—	
note on (Abbe). 1897. pp. 213, 308.....	A29.6:25
same (Cuthbertson). 1902. p. 125.....	A29.6:30
peculiarities in, over coast region of South Carolina (Jesunofsky). 1902. p. 479.....	A29.6:30
publications on (Abbe). 1898. p. 217.....	A29.6:26
St. Paul, note on (Abbe). 1897. p. 401.....	A29.6:25
Hoar, especially rich in nitrogen (Abbe). 1896. p. 371.....	A29.6:24
First killing, dates of, in Indian Territory and Oklahoma (Abbe). p. 328.....	A29.6:22
Injury from, and methods of protection (Hammon). 1896.....	A29.2:F92
same, revised. 1899.....	A29.3:23
Mardela Springs, Md., in May (Abbe). p. 172.....	A29.6:23
Moonshine and, notes on (Abbe). 1898. pp. 115, 261.....	A29.6:26
Notes on (Garriott). 1898.....	A1.9:104
Popular queries about, with answers (Kimball). 1901. p. 422..	A29.6:29
Predictions, value of, and best method of making them locally (Linney). 1894. p. 230.....	A29.6:21
Prevention of, radiant heat for, notes on (Abbe). 1899. p. 156..	A29.6:27
Protection from—	
experiments in, notes on (Abbe). 1899. p. 62.....	A29.6:27
hot water in (Abbe). 1900, p. 110.....	A29.6:28
note on—	
1894 (Abbe). p. 463.....	A29.6:22
1895 (Kedzie). p. 295.....	A29.6:23
1899 (Abbe). p. 475.....	A29.6:27
Resistance of strawberries to. 1901. p. 19.....	A1.9:133
Strawberry crop and, note on (Abbe). 1899. p. 474.....	A29.6:27
Work on, in South Africa, notes on (Abbe). 1900. p. 14.....	A29.6:28
Frostless belts, notes on (Abbe). 1893. p. 365.....	A29.6:21
Frosts and freezes as affecting cultivated plants (Galloway). 1895. p. 143.....	A1.10:895
Fruit crop:	
Condition of, monthly notes on.....	A27.9:
Prospects in United States. May 1, 1894. p. 251.....	A27.9:32
same.....	A27.9:F94
Fruit-culture institute. See Geisenheim-on-the-Rhine, Prussia.	
Fruit garden, home, preparation and care (Corbett). 1902.....	A1.9:154
Fruit growers:	
Bees of great value to (Benton). 1892. p. 254.....	A9.7:4

# Index

	Classification no.
<b>Fruit growers—Continued</b>	
Irrigation practice among, on Pacific coast (Wickson). 1902....	A10.3:108
Practical suggestions for (Gould). 1902.....	A1.9:161
<b>Fruit growing:</b>	
California. 1892. p. 99 .....	A1.8:20
Indiana. 1873. p. 356 .....	A27.9:11
Irrigation in (Wickson). 1900 .....	A1.9:116
Progress in—	
1899. p. 748 .....	A1.10:899
1900. p. 731 .....	A1.10:900
1901 (Ragan). p. 673.....	A1.10:901
Southern, for market. p. 143 .....	A1.1:871
<b>Fruit industry:</b>	
California, statistics of (Holmes). 1901 .....	A27.8:23
Influence of refrigeration on (Taylor). 1900. p. 561 .....	A1.10:900
Substitution of domestic for foreign-grown fruits and (Taylor). 1897. p. 305 .....	A1.10:897
same, reprinted, with historical and descriptive notes on varieties of apples suitable for export trade. 1898.....	A21.3:7
<b>Fruit-tree bark-beetle, circular relative to (Chittenden). 1898.....</b>	A9.5:29
<b>Fruit trees:</b>	
Arsenical spraying of, while in blossom (Lintner). 1893. p. 181.	A9.7:6
Close root pruning of (Clark). 1899. p. 13 .....	A1.9:103
Fruits and, of Middle States, propagation, influence of stocks, diseases, and enemies (Lodge). p. 199.....	A1.1:865
Gum in, production of (Vasey). 1874. p. 27 .....	A27.9:12
Important enemy to; San Jose scale; its appearance in eastern U. S.; measures to be taken to prevent its spread and destroy it (Howard). 1893 .....	A9.5:3
Insecticides on, some effects of early spring applications of (Felt). 1900. p. 22 .....	A9.6:26
Winter killing of, note on (Abbe). 1900. p. 15.....	A29.6:28
<b>Fruit worm:</b>	
Japanese peach, report on. 1889. p. 64 .....	A9.7:2
Morelos orange, report on (Riley). 1888. p. 45.....	A9.7:1
<b>Fruitarians and Chinese, nutrition investigations among, at California     Agricultural Experiment Station, 1899-1901 (Jaffa). 1901....</b>	A10.3:107
<b>Fruits:</b>	
American—	
regulations of foreign governments regarding importation of (Howard). 1900 .....	A9.5:41
scale insects on, imported into Germany (Reh). 1900. p. 79.	A9.6:22
American and East Asian, sketch of relationship between (Bailey). 1894. p. 437.....	A1.10:894
Breeding of, notes on (Hansen). 1893. p. 92 .....	A10.3:16
Canning vegetables and, in U. S., statistics of, from census of 1890. 1895. p. 552.....	A1.10:895
same. 1896. p. 595 .....	A1.10:896
Catalogue of, recommended for cultivation in various sections of U. S. 1897 .....	A20.3:6
same, including British provinces. 1899 .....	A20.3:8
Culture of, paper on (Ford). 1883. p. 221.....	A1.7:2
Decays in, study of (Halsted). 1893. p. 91.....	A10.3:16
Deciduous, notes on irrigation of (Wickson). 1900. p. 80 .....	A10.3:76
Desiccation of (Watts). 1875. p. 507.....	A27.9:875
Diseases of, spraying for (Galloway). 1896.....	A1.9:38
Dried—	
San Jose scale on (Howard). 1898. p. 7 .....	A9.6:18
trade in, report on. p. 578.....	A1.1:878
Exotic, of California, notes of (Hilgard). 1892. p. 137.....	A1.8:20
Experiments with fertilizers on, to study feeding capacities of plants and variations due to action of fertilizers. 1891 .....	A10.4:19
Field notes, 1890 (Smith). p. 107 .....	A28.5:6
same, 1892 (Smith). p. 373 .....	A28.5:7
Florida—	
description of (Atwood). p. 140 .....	A1.1:867
protection in, notes on (Abbe). 1900. p. 16.....	A29.6:28

**Fruits—Continued**

Fruit trees and, of Middle States, propagation, influence of stocks, diseases, and enemies (Lodge). p. 199.....	A1.1:865
Gathering, ripening, and keeping (Clarke). p. 152.....	A1.1:864
Hardy, popular varieties of (Elliott). p. 141.....	A1.1:864
same, cont'd (Elliott). p. 186.....	A1.1:865
same, cont'd (Elliott). p. 131.....	A1.1:866
same, cont'd (Elliott). p. 129.....	A1.1:867
Hemipterous insect punctures on, effect of (Webster). 1887. p. 54.....	A9.3:13
Insects affecting (Howard). 1896. p. 100.....	A9.6:4
Iowa, northern, cultivation of. 1868. p. 321.....	A27.9:6
Japanese insects, two, injurious to (Matsumura). 1898. p. 36..	A9.6:10
Mechanical cold storage for (Clark). 1900. p. 12.....	A1.9:119
Michigan, Lake, eastern shore of, statistics of (Ganzhorn). 1869. p. 298 *.....	A27.9:7
Michigan, culture of. 1872-73. p. 45.....	A27.9:13
same, in western part. 1868. p. 322.....	A27.9:6
Michigan region, facts relating to (Clubb). 1870. p. 37.....	A27.9:8
Mississippi rapids, culture on (Gregg). 1869. p. 225.....	A27.9:7
Naming and exhibiting, rules for. 1900. p. 742.....	A1.10:900
Notes on (Galloway). 1889. pp. 37, 92, 214.....	A28.5:5
Originators of, list of. 1889.....	A10.4:6
same, with addresses and names of specialties.....	A10.4:18
Our native, improvement of (Bailey). 1896. p. 297.....	A1.10:896
Peaches and other, in England. 1895.....	A12.4:1
Planting, distances apart, in commercial plantations. 1897. p. 689.	A1.10:897
Popular varieties of (Elliott). p. 368.....	A1.1:875
Production of, in U. S. in 1889, and quantities and values im- ported from 1890-1895. p. 551.....	A1.10:895
same, 1891-1896. p. 596.....	A1.10:896
Protection of, from injury by heat or cold during transportation (Harrington). 1894.....	A29.2:F94
Regions of northern U. S., and their local climates (Lippincott). p. 137.....	A1.1:866
Russian and other, adaptation of, to extreme northern portions of U. S. (Lyon). 1888.....	A20.3:2
Seriously injured by moths (Mally). 1902. p. 90.....	A9.6:31
Setting without pollination, etc. (Hartley). 1902.....	A19.3:22
Small—	
culture for market (Taylor). 1895. p. 283.....	A1.10:895
culture of (Gilchrist). p. 57.....	A20.1:895
Spraying for insect pests and fungous diseases, with special consid- eration of subject in its relation to public health. 1892.....	A1.9:7
Stone, food value of (Langworthy). 1899. p. 22.....	A1.9:105
<i>See also</i> Peach twig-borer.	
Thinning, experiments found profitable. 1898. p. 15.....	A1.9:73
Tropical and semitropical, condition of, in U. S. in 1887; Florida and Gulf States (Reasoner). p. 7.....	A20.3:1
same, California, Arizona, and New Mexico (Klee). p. 111..	A20.3:1
Utilizing surplus (Brackett). p. 309.....	A1.10:898
Varieties, little-known, considered worthy of wider dissemina- tion (Taylor). 1901. p. 381.....	A1.10:901
Vegetables and, from California, transportation rates on. 1883. No. 59. p. 45.....	A27.9:21
West, far, native, (Thompson). p. 207.....	A1.1:865
West Virginia, insects, observations on (Hopkins). 1896. p. 71.	A9.6:6
Wild, of northern Wisconsin. 1890. p. 484.....	A27.9:28
Wisconsin, culture of. 1868. p. 322.....	A27.9:6
<i>See also</i> Apples — Apricots — Bananas — Berries — California — Caprifig — Cherries — Citron — Date — East Asian fruits — Figs — Grape — Isabella grape — Le Conte pear — Muscatel raisins — Muskmelons — Nursery stock — Olive — Orange — Peaches — Pear — Pineapple — Plums — Pollination — Poma- ceous fruits — Pomology Division — Prunes — Quince — Raisin grape — Raisins.	

\* By a misprint, this page number appears twice.

# Index

	Classification no.
<b>Fruits and fruit products:</b>	
Analysis of, provisional method for (Munson and Tolman). 1902. p. 74 .....	A7.3:65
Chemical and microscopical examination, pt. 1, Chemical examination (Munson and Tolman). 1902. p. 9. ....	A7.3:66
Same; Pt. 2, Microscopical examinations (Howard). 1902. p. 103 .....	A7.3:66
<b>Fruits of grasses. See Caryopsis of grasses.</b>	
Fryer, Michael. Flax culture, instructions in. p. 92 .....	A1.1:864
Fuegia and Patagonia, mosses from, collected by U. S. S. "Albatross" in 1887-91, list of (Eaton). 1892. p. 138 .....	A6.5:1
<b>Fuelling, John L.:</b>	
Sorghum-sugar experiments at Meade, Kans. 1889. p. 79 .....	A7.3:26
same, at Sterling, Kans. 1892. p. 30 .....	A7.3:37
See also, as collaborator, Wiley, Harvey Washington.	
<b>Fuller (Governor of Vermont). Address of, before National Road Conference, July, 1894. p. 3 .....</b>	<b>A22.3:10</b>
<b>Fuller, B. F. See, for report as Chief of Accounts and Disbursements Division, Agriculture Department, 1892 .....</b>	<b>A2</b>
<b>Fullinwider, J. H.:</b>	
Cattle interests of West. p. 271 .....	A4.1:884
Southern cattle fever, fatal outbreak of, at Deerfield stock farm, Kans. p. 463 .....	A4.1:884
<b>Fulton, M. W. Draft upon horses. p. 511 .....</b>	<b>A4.1:898</b>
<b>Fulton, Weston M.:</b>	
Forest clearing and cultivation, effect of, upon water supply and soil, rainfall, temperature. 1899. p. 89 .....	A29.3:24
River gages, automatically recording, introduction of. 1902. p. 220 .....	A29.3:31
Scientific investigation under certain conditions, original, advisability of supplying employees of Weather Bureau with apparatus for carrying on. 1902. p. 22 .....	A29.3:31
<b>Fultz wheat, description of. 1871. p. 327 .....</b>	<b>A27.9:9</b>
<b>Fumigation with carbon bisulphide (Du Buysson). 1893. p. 159 ..</b>	<b>A9.7:6</b>
Same (Hinds). 1901. p. 78 .....	A9.6:30
<b>Fumigator for small orchard trees. 1901. p. 21 .....</b>	<b>A1.9:133</b>
<b>Fumigator, Emory; new method for handling hydrocyanic-acid gas in orchards (Johnson). 1899. p. 43 .....</b>	<b>A9.6:20</b>
<b>Fungi:</b>	
Abnormal structures in, induced by <i>Ustilago zeæ mays</i> , study of. (Knowles). 1889. p. 14 .....	A28.5:5
Algæ and toxic effects of Bordeaux mixture on (Swingle). 1896. ....	A28.3:9
Attacks of, treatment of seed with copper sulphate to prevent. (Evans). 1896 .....	A28.3:10
Blackberry rust, Perennial mycelium of (Newcombe). 1891. p. 106 .....	A28.5:6
Custer County, Colorado. (Cockerell). 1889. p. 84 .....	A28.5:5
Described in recent reports of Connecticut Experiment Station (Thaxter). 1891. p. 278 .....	A28.5:7
Economic and other, collection of, prepared for distribution (Patterson). 1902 .....	A19.3:8
Edible and poisonous, some (Farlow). 1897. p. 453 .....	A1.10:897
same, reprinted. 1898 .....	A28.3:15
Few new, report on (Ellis and Tracy). 1891. p. 76 .....	A28.5:6
Field observations with (Halsted). 1894. p. 93 .....	A10.3:20
Fossil, notes on (James). 1891. p. 268 .....	A28.5:7
Grape, microscopic observations of (Taylor). 1876. p. 464 .....	A27.9:14
Hawthorn, microscopic investigations of (Taylor). 1873. p. 431. ....	A27.9:11
Helena, Mont., notes on (Kelsey). 1889. p. 80 .....	A28.5:5
same, supplement (Anderson). 1889. p. 82 .....	A28.5:5
Hymenomycetous, some new species of (Ellis and Everhart). 1889. p. 24 .....	A28.5:5
Hyphomycetous, new species of (Ellis and Everhart). 1889. p. 68 .....	A28.5:5
Kansas, new species of (Kellerman and Swingle). 1889. p. 11 ..	A28.5:5
same (Ellis and Kellerman). 1889. p. 142 .....	A28.5:5
Louisiana, new species of (Ellis and Langlois). 1891. p. 35 ....	A28.5:6

**Fungi—Continued**

Montana, brief notes on few common (Anderson). 1889. p. 30.	A28.5:5
New species of, notes on—	
1889. (Kellerman and Swingle). p. 72.....	A28.5:5
1891. (Ellis and Galloway). p. 31.....	A28.5:6
1891. (Ellis and Halsted). p. 33.....	A28.5:6
1891. (Ellis and Everhart). p. 130.....	A28.5:7
1891. (Ellis). p. 274.....	A28.5:7
New western (Ellis and Galloway). 1889. p. 65.....	A28.5:5
New York, western, new or rare species from, notes on (Fairman). 1889. p. 78.....	A28.5:5
North American, new and rare species of (Ellis and Everhart). 1889. p. 145.....	A28.5:5
North and South America, observations on, new species of (Lagerheim). 1891. p. 44.....	A28.5:7
Potato, microscopic observations of (Taylor). 1873. p. 251.....	A27.9:11
same (Taylor). 1874. p. 273.....	A27.9:12
Potato, scab, remarks on (De Lagerheim). 1891. p. 103.....	A28.5:7
Smut, recent investigations on. 1889. p. 87.....	A28.5:5
same (Brefeld). 1891. pp. 1, 59, 153.....	A28.5:6
Study of, especially in their relation to plant diseases (Journal of Mycology).....	A28.5:
Texas (Ravenel). 1869. p. 169.....	A1.2:C29 <sup>1</sup>
same. p. 171.....	A1.2:C29 <sup>2</sup>
Western, new (Ellis and Galloway). 1889. p. 65.....	A28.5:5
<i>See also</i> Agarics—Agaricus campestris—Black spot—Erysipheæ—Exsiccati—Fossil fungi—Grape fungi—Hymenomycetes—Hymenomycetous fungi—Hypoxylon—Isaria—Kansas fungi—Leaf-galls—Mucronoporus—Mucronoporus Andersoni—Mushrooms—North American agarics—Nummularia—Puccinia—Pyrenomycetes—Saccardo's sylloge—Smut fungi—Uromyces—Ustilago zeæ mays.	
<b>Fungicides:</b>	
Bordeaux mixture as (Fairchild). 1894.....	A28.3:6
Combination with new and old insecticides, some observations on (Galloway). 1894. p. 126.....	A9.7:7
Comparative test of, in checking potato blight and rot (Jones). 1893. p. 89.....	A10.3:16
Copper salts as (Chester). 1891. p. 21.....	A28.5:6
Effects of certain, upon vitality of seeds (Crozier). 1891. p. 8..	A28.5:6
Experiments with—	
general, in 1889 (Earle). 1890. p. 83.....	A6.3:11
in removal of lichens from pear trees (Waite). 1891. 264...	A28.5:7
to prevent leaf blight of nursery stock (Fairchild). 1891. p. 338.	A28.5:7
Formulas for —	
1895. p. 589.....	A1.10:895
1896. p. 627.....	A1.10:896
1897. p. 675.....	A1.10:897
Notes on (Galloway). 1891. p. 25.....	A28.5:6
Report on (Scribner). 1888.....	A28.4:5
Spraying with, effect of, on growth of nursery stock (Galloway). 1894.....	A28.3:7
<b>Fungicides and insecticides:</b>	
Chemical analysis, methods of (Haywood). 1902.....	A7.4:10
Chemical composition and effectiveness of certain preparations (Haywood). 1901.....	A1.9:146
same (Haywood). 1902.....	A7.3:68
Report on, before Association of American Agricultural Chemists—	
1899. (Voorhees). p. 101.....	A7.3:57
1900. p. 139.....	A7.3:62
1901. p. 87.....	A7.3:67
<i>See also</i> Fungicides—Insecticides.	
<b>Fungous diseases:</b>	
Forest trees (Schrenk). 1900. p. 199.....	A1.10:900
Grasshoppers, experimental work with (Howard). 1901. p. 459.	A1.10:901
Iowa, new (Pammel). 1891. p. 95.....	A28.5:7
Killing destructive locusts with (Bruner). 1902. p. 50.....	A9.6:38



# Index

	Classification no.
Fungous diseases—Continued	
Relation of climate and rainfall to prevalence of. 1899. p. 126..	A10.3:65
Spraying fruits for. 1892.....	A1.9:7
Treatment of (Goff). 1891. p. 17.....	A28.5:7
<i>See also</i> Grape—Plants.	
Fungous parasite on <i>Aleyrodes citri</i> R. and H., preliminary notice of (Webber). 1891. p. 363 .....	A28.5:7
Funston, Frederick. <i>See</i> Coville, Frederick Vernon.	
Fur animals. <i>See</i> Marten.	
Furnas, Robert W.:	
Arizona and New Mexico, agricultural features of. 1892. p. 173..	A1.8:20
Forest conditions and lumber and wood trade of western States and Territories. 1884. pp. 246, 255 .....	A13.5:4
Forestry, for certain portions of Ohio and Indiana. 1884. p. 346..	A13.5:4
Raisin-making. 1892. p. 117 .....	A1.8:20
Standard Sugar Refinery, Alvarado, Cal., report on. 1892. p. 91.	A1.8:20
Swine, crossing improved breeds of, with common hogs of Florida. 1895 .....	A4.4:4
Tree growth, maximum size and age, period of decline, completion of cycle, etc. 1884. p. 338.....	A13.5:4
Tree planting and growing on the plains. 1883. p. 202.....	A1.7:2
same. p. 37.....	A1.8:28
<i>See also</i> , as joint author, Hilgard, Eugene Woldemar.	
Furs, insects which attack, fumigation with bisulphide of carbon for complete and rapid destruction of (Du Buysson). 1893. p. 159 .....	A9.7:6
Gadflies, remedy for, Porchinski's recent discovery in Russia, with some American observations (Howard). 1899. p. 24.....	A9.6:20
<i>See also</i> Tabanidæ.	
Gadsden, John W.:	
Cattle, diseases of, contagious, how they are imported and what they cost. 1883. p. 49 .....	A1.8:29
Cattle plague or rinderpest, symptoms of. 1879. p. 255.....	A1.6:12
Pleuro-pneumonia among cattle in Pennsylvania. p. 47.....	A1.1:881-2
Gage canal, Riverside, California, duty of water under (Irving):	
1899. p. 131 .....	A10.3:86
1900. p. 137 .....	A10.3:104
1901. p. 146 .....	A10.3:119
Gain, Edmond:	
Agricultural botany, review of publications on, issued in France during 1896. 1897. pp. 841, 940.....	A10.6:8
Physiological rôle of water in plants. 1897. p. 3 .....	A10.6:8
Gaines, Richard V. Animal industry of U. S. with especial reference to breeding of cattle, horses, etc. 1883. p. 122.....	A1.7:2
Galapagos Islands, S. A. Plants from, collected by U. S. S. "Albatross" in 1887-91, list of (Rose). 1892. p. 136 .....	A6.5:1
Galbraith, S. J. Vanilla culture as practiced in Seychelles Islands. 1898 .....	A6.3:21
Gale, A. H. Tornado observations, report of. 1899. p. 303.....	A29.6:27
Gale at Buenos Ayres, Argentina (Abbe). 1895. p. 381.....	A29.6:23
Gales:	
Effect of, in causing high water (Abbe). 1894. p. 297.....	A29.6:21
January, from Great Lakes to maritime provinces (Webber). 1902. p. 11 .....	A29.6:30
Northwest, of southern Blue Ridge and Piedmont region (Hawkins). 1899. p. 13.....	A29.6:27
Gall-fly, tulip-tree leaf, report on. 1890. p. 362 .....	A9.7:2
Gall fungus. <i>See</i> Cranberry gall fungus.	
Gall gnat. <i>See</i> Rye gall gnat.	
Gall makers, notes on (Smith). 1891. p. 27.....	A9.7:4
Gallatin Valley, Mont. Duty of water in (Fortier). 1900. p. 175..	A10.3:86
Galloway, Beverly Thomas:	
Black rot, brown rot, downy mildew, powdery mildew, and anthracnose of grape; pear scab and leaf blight and apple powdery mildew, treatment of. 1891. p. 11 .....	A28.5:6
Black rot of grape, treatment of. n. d. ....	A28.4:6
same. 1889. p. 204 .....	A28.5:5



<b>Galloway, Beverly Thomas—Continued</b>	
Cercospora circumscissa, treatment of, suggestions in regard to. 1891. p. 77 .....	A28.5:7
Frosts and freezes as affecting cultivated plants. 1895. p. 143 ..	A1.10:895
Fruit diseases, spraying for. 1896 .....	A1.9:38
Fruits, notes on. 1889. pp. 37, 92, 214.....	A28.5:5
Fungicides, effect of spraying with, on growth of nursery stock. 1894 .....	A28.3:7
Fungicides and new spraying pump, notes on. 1891. p. 25.....	A28.5:6
Fungous diseases of plants, experiments made in 1889 in treatment of. 1890.....	A6.3:11
Grain, new method of treating, by Jensen process for prevention of smut. 1891. p. 372.....	A28.5:7
Grape, fungous diseases of, and their treatment. 1891 .....	A1.9:4
Grapevine diseases, circular on. n. d.....	A28.4:7
Insect pests and plant diseases, proceedings of national convention for suppression of, held at Washington, D. C., Mar. 5 and 6, 1897 .....	A1.8:57
Insecticides, new and old, and their combination with fungicides, some observations on. 1894. p. 126.....	A9.7:7
Japy knapsack sprayer, improved. 1891. p. 39.....	A28.5:7
Knapsack sprayer, new, description of. 1891. p. 51 .....	A28.5:6
Nursery stock, treatment of, for leaf blight and powdery mildew. 1891 .....	A28.4:10
Pathology of plants, lines of investigation that might be undertaken by experiment stations. 1897. p. 725 .....	A10.6:7
Pear leaf blight and apple powdery mildew, experiments in treatment of. 1889 .....	A28.4:8
Pine leaf rust, new. 1891. p. 44.....	A28.5:7
<b>Plant diseases—</b>	
progress in treatment of, in U. S. 1899. p. 191 .....	A1.10:899
treatment of, experiments in. 1891. p. 12. (Pt. 3. For pts. 1, 2, see Galloway and Fairchild).....	A28.5:7
same. 1891 .....	A28.3:3
Plant diseases, and possibility of lessening their spread by legislation. 1897. p. 8 .....	A1.8:57
<b>Plants—</b>	
commercial growing of, under glass, progress of. 1899. p. 575..	A1.10:899
health of, in greenhouses. p. 247.....	A1.10:895
Potato diseases, some destructive, what they are and how to prevent them. 1894 .....	A1.9:15
Potato diseases and their treatment. 1899.....	A1.9:91
Rusts affecting wheat and other cereals, treatment of, experiments in. 1891. p. 195.....	A28.5:7
Smut in oats and barley, notes on. 1889. p. 164.....	A28.5:5
Spraying devices, new, circular on. 1899.....	A28.4:17
Vegetable pathology section, record of some work of, including correspondence and other communications. 1889. p. 41.....	A6.3:8
Vegetable Physiology and Pathology Division, Agriculture Department, work of, for farmer. 1897. p. 99.....	A1.10:897
<i>See also, as joint author, Ellis, J. B.</i>	
<i>See also, for reports as Chief, section of vegetable pathology, 1888, 1889; Division of Vegetable Pathology, 1890-1894; and Division of Vegetable Physiology and Pathology, 1896, 1897, 1899, and 1900 .....</i>	
<i>See also, for reports as Chief, Plant Industry Bureau, Agriculture Department, 1901, 1902.....</i>	
<i>See also, for report as Superintendent, Gardens and Grounds Division, Agriculture Department, 1900 .....</i>	
Galloway, Beverly Thomas, and Fairchild, David Grandison. Plant diseases, treatment of, experiments in. 1891. pp. 89, 137. (Pts. 1 and 2; for pt. 3, see Galloway, Beverly Thomas).....	A28.5:6
<b>Galloway, Beverly Thomas, and Southworth, E. A.:</b>	
Apple scab, treatment of, 1889. p. 210.....	A28.5:5
Oat disease, new and destructive, preliminary notes on. 1891. p. 72 .....	A28.5:6

# Index

	Classification no.
Galloway, Beverly Thomas, and Woods, Albert Fred:	
Trees, shade and ornamental, diseases of. 1896. p. 237.....	A1.10:896
Water as factor in growth of plants. 1894. p. 165.....	A1.10:894
Gall's method, manufacture of grape, blackberry, and other fruit wines, on (Bossert). p. 156.....	A1.1:863
Galveston, Tex.:	
Hurricane of Sept. 8, 1900, special report on. p. 372.....	A29.6:28
Tornado, Nov. 6, 1892 (Wright). p. 309.....	A29.6:20
Weather forecast district, report of (Cline). 1902. p. 292.....	A29.6:29
Game:	
Information concerning seasons, shipment, and sale (Palmer and Olds). 1900.....	A5.4:31
Laws of District of Columbia for protection of. 1901.....	A5.4:34
Noxious animals and, statistics of, in some foreign countries. 1888. p. 366.....	A27.9:26
Protection of, directory of State officials and organizations for 1901 (Palmer).....	A5.4:33
same. 1902.....	A5.4:35
Transportation and sale of, laws regulating (Palmer and Olds). 1900.....	A5.3:14
<i>See also</i> Birds and game.	
Game birds:	
Eggs of, regulations for importation of, for propagation. 1902....	A5.4:37
Of United States (Elliot). p. 356.....	A1.1:864
<i>See also</i> Woodcock — Woodduck.	
Game laws, digest of (Palmer and Olds):	
1901.....	A5.3:16
1902.....	A1.9:160
Game laws of Prussia. 1871. p. 205.....	A27.9:9
Gamgee, John:	
Cattle diseases, general remarks on. 1869. p. 162.....	A1.2:C29 <sup>1</sup>
Corn, smutty, ill effects of, on cattle. 1869. p. 78.....	A1.2:C29 <sup>1</sup>
same. p. 73.....	A1.2:C29 <sup>2</sup>
Pleuro-pneumonia or lung plague of cattle, preliminary report. 1868. p. 432.....	A27.9:6
same, full report. 1869. p. 7.....	A1.2:C29 <sup>1</sup>
same, p. 3.....	A1.2:C29 <sup>2</sup>
Splenic or periodic fever of cattle. 1869. p. 89.....	A1.2:C29 <sup>1</sup>
same, p. 82.....	A1.2:C29 <sup>2</sup>
Gamopetalæ of western Texas, description of (Coulter). 1892. p. 153.....	A6.5:2
Gannett, Henry. Rainfall maps, construction of. 1902. pp. 205, 223.	A29.6:30
Ganzhorn, Jacob. Fruits on eastern shore of Lake Michigan, statis- tics of. 1869. p. 298*.....	A27.9:7
Gape disease:	
Chickens. 1898. p. 28.....	A1.9:84
Fowls. p. 550.....	A1.1:885
same, p. 274.....	A4.1:885
Fowls, and parasite by which it is caused (Megnin). p. 269.....	A1.1:884
same, p. 281.....	A4.1:884
same, 1884. p. 103.....	A4.2:An5
Young poultry in Kentucky (Garman). p. 504.....	A4.1:898
Garden, irrigation for (Taft). 1895. p. 233.....	A1.10:895
<i>See also</i> Farm — Grass gardens — Home fruit garden — Seed test- ing — Vegetable garden.	
Garden, United States propagating:	
Plants, bulbs, tubers, etc., distributed from, and object and aims of (Saunders). 1862.....	A1.8:2
Notes from, 1871. (Saunders). p. 476.....	A27.9:9
same, 1872. p. 72.....	A27.9:10
Garden, experimental, Agriculture Department. <i>See</i> Experimental Gardens and Grounds Office.	
Garden and field, irrigation in (Wickson). 1901.....	A1.9:138
Garden City, Kans., grass and forage experiment station at (Sewall). p. 342.....	A1.1:891
same. p. 342.....	A6.1:891

\* By a misprint, this page number appears twice.

		<b>Index</b>
		<b>Classification no.</b>
<b>Garden crops:</b>		
Florida, insects injurious to (Ashmead). 1887. p. 9.....		A9.3:14
Insects injurious to (Chittenden). 1899.....		A9.6:19
same (Chittenden). 1900.....		A9.6:23
Fertilizers for (Clark). 1898. p. 12.....		A1.9:105
<i>See also</i> Crops.		
Garden herbarium, making, and its uses (Selby).....		A10.3:76
<b>Garden insects:</b>		
Notes on (Webster). 1890. p. 149.....		A9.7:3
Observations in West Virginia on, some notes on (Hopkins). 1896. p. 71.....		A9.6:6
Tests with insecticides upon (Alwood). 1887. p. 38.....		A9.3:13
<i>See also</i> Garden crops.		
Garden pest, <i>Orthezia insignis</i> as (Cockerell). 1892. p. 89.....		A9.7:5
Garden truck, rates of charge for transporting, with notes on growth of industry (Ward and Holmes). 1901.....		A27.8:21
<b>Garden vegetables:</b>		
Particularly onions, cabbage, and squash (Huntington). p. 110..		A1.1:864
Two dipterous leaf miners on (Coquillett). 1895. p. 381.....		A9.7:7
<i>See also</i> Potato — Yams.		
<b>Gardening:</b>		
Hospital. 1865. No. 2. p. 12.....		A27.9:3
Landscape, report on. p. 159.....		A1.1:869
<i>See also</i> Agriculture.		
Gardening under glass. 1901. p. 11.....		A1.9:144
Gardens and Grounds Division, Agriculture Department.....		A41.
Gardens and grounds. <i>See</i> Experimental Gardens and Grounds Office.		
Gardini, Carlo. Hemp in Italy, special consular report on growth of. 1897. p. 15.....		A11.5:11
<b>Gardner, Frank Duane:</b>		
Electrical method of moisture determination in soils, results and modifications in 1897. 1898.....		A26.3:12
Porto Rico Agricultural Experiment Station, annual report for 1901. p. 381.....		A10.1 <sup>2</sup> :901
<i>See also</i> , as joint author, Means, Thomas Herbert—Whitney, Mil- ton.		
<b>Gardner, Frank Duane, and Jensen, Charles A.:</b>		
Soil survey in Sevier Valley, Utah. p. 243.....		A26.5:900 <sup>1</sup>
Soil survey in Weber Co., Utah. p. 207.....		A26.5:900 <sup>1</sup>
<b>Gardner, Frank Duane, and Stewart, John:</b>		
Soil survey in Salt Lake Valley, Utah. 1900. p. 77.....		A1.8:64
Soils of Salt Lake Valley, Utah.....		A26.4:4
Gardner, Thomas. Wild flowers. p. 155.....		A1.1:862
Gardner, W. H. Animals, training, for work. p. 355.....		A1.1:866
Garlic, wild, circular relative to (Dewey).....		A6.4:9 <sup>1</sup>
<b>Garman, H.:</b>		
Entomologist, economic, illustrations for. 1893. p. 109.....		A9.7:6
Entomology in Southern States, report on. 1901. p. 153.....		A10.3:99
Gape disease of young poultry in Kentucky. p. 504.....		A4.1:898
Hessian fly, spring brood of, time of emergence and oviposition of. 1902. p. 127.....		A10.3:115
Larvæ, preservation of, for study. 1893. p. 98.....		A9.7:6
Sarcoptidæ, parasitism among, origin and development of. 1891. p. 182.....		A9.7:4
Garrigues, W. E. Phosphoric acid, determination of, by molybdate method. 1894. p. 105.....		A7.3:43
<b>Garriott, Edward Bennett:</b>		
Address, as chairman section of forecasts and forecasting, before second convention of Weather Bureau officials held at Mil- waukee, Wis., Aug. 27-29, 1901. 1902. p. 115.....		A29.3:31
Atmospheric pressure, high and low, 1895 to 1898. p. 593.....		A29.6:26
Chinook winds, report on. 1892. p. 23.....		A29.6:20
Cold waves on middle Gulf coast, report of. 1895. p. 334.....		A29.6:23
Frost, notes on. 1899.....		A1.9:104
Morrill, Park, short biography of. 1898. p. 356.....		A29.6:26

# Index

	Classification no.
Garriott, Edward Bennett—Continued	
Pacific coast, north, high areas of, in September, October, and November. p. 249.....	A29.6:23
Rain-producing processes, some. 1899. p. 67.....	A29.3:24
River and flood service, monthly notes on. Aug., 1898.....	A29.6:26
St. Lawrence Valley, high areas north of, in October, November, and December. p. 292.....	A29.6:23
Signals, Weather Bureau. 1892. p. 48.....	A29.3:7
Storms—	
floods and cold waves of year, report on. p. 208.....	A1.1:898
same, p. 27.....	A29.1:898
tropical, of Gulf of Mexico and Atlantic Ocean, in September, 1895. p. 167.....	A29.6:23
types of, in January, 1895. p. 9.....	A29.6:23
Warm waves of July and August, 1892. p. 223.....	A29.6:20
Weather, unseasonable, in U. S. 1902. p. 301.....	A29.6:30
Weather Bureau work, extension of. 1900. p. 242.....	A29.6:28
Weather conditions, monthly statement of average—	
September, 1890. p. 395.....	A29.6:28
October, 1900. p. 430.....	A29.6:28
November, 1900. p. 483.....	A29.6:28
December, 1900. p. 538.....	A29.6:28
January, 1901. p. 21.....	A29.6:29
February, 1901. p. 57.....	A29.6:29
March, 1901. p. 117.....	A29.6:29
April, 1901. p. 162.....	A29.6:29
May, 1901. p. 208.....	A29.6:29
June, 1901. p. 258.....	A29.6:29
July, 1901. p. 307.....	A29.6:29
Weather forecasts and storm warnings, monthly notes on. Sept., 1898–Oct., 1902.....	A29.6:
Weather types, classified, report on. 1901. p. 548.....	A29.6:29
West Indian hurricanes. 1900.....	A29.5:H
West Indian weather-bureau service. 1898. p. 303.....	A29.6:26
Wind-barometer table, report on. 1897. p. 204.....	A29.6:25
Gas:	
Illuminating, influence of, upon plants (McMurtrie). 1875. p. 310.....	A27.9:13
New, in atmosphere, notes on (Abbe). 1898. p. 217.....	A29.6:26
Treatment for scale-insects (Coquillett). p. 123.....	A1.1:887
same (Coquillett) supplementary report. p. 41.....	A9.7:1
Use of, against scale-insects. 1887. p. 35.....	A9.3:15
<i>See also</i> Hydrocyanic-acid gas.	
Gayon, M. <i>See</i> , as joint author, Millardet, Pierre Marie Alexis.	
Geddings, R. M. Meteorological notes from Porto Rico. 1900. p. 287.....	A29.6:28
Geer, T. T. Oregon, road improvement in, extract from governor's inaugural address. p. 8.....	A22.4:33
Geese:	
Checklist of animal parasites of (Hassall). 1896.....	A4.4:14
Ducks and, standard breeds and management of (Howard).....	A1.9:64
Raising for profit. 1897. p. 12.....	A1.9:65
<i>See also</i> Ducks.	
Geisenheim-on-the-Rhine, Prussia. Royal institute for fruit and vine culture at, report on. 1885. p. 32.....	A1.8:36
Geitel, H. <i>See</i> , as joint author, Elster, J.	
Gemmell, R. C.:	
Big Cottonwood Creek, Utah, duty of water on. 1900. p. 197 ..	A10.3:86
same. 1902. p. 165.....	A10.3:104
Water administration in Utah. 1902. p. 159.....	A10.3:104
Generative organs, diseases of:	
Cattle (Law). p. 169.....	A4.2:C29 <sup>2</sup>
Horses (Law). p. 135.....	A4.2:H78
Geneva, N. Y. <i>See</i> New York State Experiment Station.	
Gennert, Theodore. Beet sugar in Europe. p. 158.....	A1.1:868
Geodesy and meteorology, notes on (Abbe). 1900. p. 545.....	A29.6:28

# Index

Classification no.

Geographic distribution of animals and plants in North America (Merriam). 1894. p. 203 .....	A1.10:894
Geographic Society, National, notes on (Abbe). 1899. p. 161. ....	A29.6:27
Geographical congress, 7th international, Berlin, 1899, notes on (Abbe). p. 470 .....	A29.6:27
Geography and meteorology, popular errors in (Abbe). 1901. p. 375.	A29.6:29
Geological ages, climates of (Abbe). 1898. p. 313 .....	A29.6:26
Geological conditions of artesian basins in eastern Colorado and New Mexico (Van Diest). 1890. p. 87.....	A15.2:Ar7 <sup>2</sup>
Geological congress. See Clermont-Ferrand, France.	
Geological structure of Nebraska, with its effect upon water supply (Hicks). 1893. pt. 3. p. 167 .....	A15.2:Ir7 <sup>2</sup>
Geological Survey, U. S., meteorology in, note on (Abbe). 1897. p. 541 .....	A29.6:25
Geology:	
South Dakota, west of Missouri River, and Wyoming, east of foothills of Rocky Mountains (Bailey). 1890. p. 65.....	A15.2:Ar7
Southern Appalachians (Keith). p. 111 .....	A1.2:Ap4 <sup>2</sup>
Geometrid moth ( <i>Calothyranis amaturaria</i> ), life history of (Packard). 1892. p. 382.....	A9.7:4
Geomyidæ. See Pocket gophers.	
Georgeson, Charles Christian:	
Agricultural experiments in Alaska. 1898. p. 515.....	A1.10:898
same. 1898. p. 7 .....	A10.3:62
Agricultural investigations in Alaska. 1899.....	A10.3:82
same. 1900 .....	A10.3:94
Alaska, pioneer farmers in, suggestions to. 1902.....	A10.10:1
Alaska experiment stations, annual report for 1901. p. 239.....	A10.1 <sup>2</sup> :901
Dairy industry of Denmark, progress report. 1893.....	A1.8:50
same, report. 1893 .....	A4.3:5
Forage plants for semiarid West. 1893. p. 145.....	A10.3:16
Kafir corn, characteristics, culture, and uses. 1896 .....	A1.9:37
Milk, quality of, selling on basis of, how shall it be accomplished in retail trade. 1896. p. 93.....	A10.3:41
Steer-feeding experiments to ascertain comparative value of corn and red and white Kafir corn. p. 483.....	A4.1:898
Georgia:	
Cattle quarantine of counties in—	
Dec. 14, 1900. p. 11.....	A4.5:80-87
Jan. 11, 1902. p. 11.....	A4.5:93
Dec. 27, 1902. p. 11 .....	A4.5:101
Cattle trade and dairy interests of (Perry). p. 335.....	A4.1:885
Climate, soil, and agricultural capabilities of (Hemphill). 1882..	A1.6:47
Coccidæ of, notes on (Scott). 1900. p. 49 .....	A9.6:26
Coccids in, fatal temperature for some (Scott). 1899. p. 82.....	A9.6:20
Colorado potato beetle in, note on. 1886. p. 32.....	A9.3:12
Conditions and resources of (Howard). p. 567.....	A1.1:866
Cotton in. 1866. p. 329.....	A27.9:4
Cotton plant in, insects injurious to the (Grote). 1878. p. 351..	A9.2:C82
Cotton worm in, in 1878 (Willet). 1878. p. 358.....	A9.2:C82
Farm resources and products of. 1868. p. 77.....	A27.9:6
Grasses of, in Elliott's sketch of botany of South Carolina and Georgia, notes on (Scribner). 1901.....	A3.4:29
Insects of year in (Quaintance). 1899. p. 56.....	A9.6:20
Irrigation of rice in (Keeney). 1902. p. 59 .....	A10.3:113
Jarring for curculio on extensive scale in, with list of insects caught (Scott and Fisk). 1902. p. 24.....	A9.6:31
Plums and peaches in, preliminary note on new species of <i>Aphis</i> injurious to (Scott). 1902. p. 56 .....	A9.6:31
Road system of, improvement of (Sheffield). 1894 .....	A22.3:3
Roads and road-building materials of (McCallie). 1902. p. 50..	A22.3:23
San Jose scale in, some practical experiments with various insecticides for (Scott). 1902. p. 41 .....	A9.6:37
Seismic noises in (Hawkins). 1897. p. 393.....	A29.6:25
Sheep husbandry in—	
1875. p. 523 .....	A27.9:13
1877 (Watts). p. 118.....	A1.2:Sh3



# Index

	Classification no.
Georgia—Continued	
Sheep husbandry in—Continued	
1878 (Peters). p. 120.....	A1.2:Sh3
<i>See also</i> Atlanta—Augusta—Cobb County—Covington—Rabun County—Towns County—Union County.	
Gerland, E. Meteorology, instrumental, historical sketch of. 18 6. p. 687.....	A29.3:11 <sup>1</sup>
Germ fertilizer, nitrogen as, for leguminous plants. 1897. p. 19 ...	A1.9:65
German agricultural experiment stations:	
Aims and tendencies of (Maercker). 1898. p. 103, 207.....	A10.6:9
Association of, ninth annual convention of, 1896, report on (Fassig). 1897. p. 447.....	A10.6:8
German Antarctic expedition, kite work of, notes on (Abbe). 1901. p. 177.....	A29.6:29
German association of investigators and physicians, annual meeting of, notes on (Abbe). 1901. p. 220.....	A29.6:29
German common school with a garden (Smith). 1899.....	A10.4:42
German Meteorological Society, eighth general meeting of (Rotch). 1898. p. 160.....	A29.6:26
German Zollverein, beet sugar manufacture in. 1870. p. 42.....	A27.9:8
Germany:	
Agricultural education in. 1876. p. 281.....	A27.9:14
Agricultural schools in, organization and management of (Welch). 1885.....	A1.8:36
Agricultural statistics of, 1864. No. 6. p. 33.....	A27.9:2
Agriculture of, letter on (Klippart). 1865. No. 6. p. 6.....	A27.9:3
American agricultural products, as an importer of. 1894. p. 33.	A27.9:32
American dried apples in.....	A12.4:2
American hams in (Barnes). p. 519.....	A4.1:898
American hog products, inspection of (Barnes). p. 516.....	A4.1:898
American products in, markets for. 1895.....	A12.3:2
Army horses of, requirements for (Kuhn). 1898. p. 31.....	A1.2:H78
Beet sugar in, progress of manufacture of. 1866. p. 179.....	A27.9:4
Cereal production in, 1876. p. 367.....	A27.9:14
Climatology in, development of. 1896. p. 652.....	A29.3:11 <sup>1</sup>
Cooperative credit unions or people's banks of. 1891. p. 339...	A27.9:29
Crops in, 1870 (Prentiss). p. 283.....	A27.9:8
Diseases of animals in, 1887. p. 47.....	A27.9:28
Dogs in, muzzling of (Mason). p. 521.....	A4.1:900
Dried apples in, American (Mason). 1895. p. 15.....	A7.3:48
Forest area of. 1876. p. 282.....	A27.9:14
Grapevine cultivation in (Bossert). p. 156.....	A1.1:863
Horse and dog meat as food in (Guenther). p. 520.....	A4.1:900
Horse-breeding in. 1876. p. 119.....	A27.9:14
Horses in, potato bread for (Hughes). p. 530.....	A4.1:899
Horses to, experience and observation in shipping (Meyers). 1898. p. 35.....	A1.2:H78
Leather manufactures in (Mason). p. 522.....	A4.1:899
Liparis (psilura) monacha in, ravages of, and means of defense. 1891. p. 379.....	A9.7:3
Meat importation into, from U. S. p. 100.....	A4.1:893-4
Meat-inspection law, imperial. 1901.....	A4.4:32
same, translation and German text. p. 523.....	A4.1:900
Military administration of, in its relations to national horse breeding. p. 372.....	A4.1:898
Nettle in, cultivation of (Stanton). p. 560.....	A1.1:878
Population of. 1875. p. 496.....	A27.9:14
Raiffeisen loan associations of. 1891. p. 414.....	A27.9:29
Scale insects on American fruit imported into (Reh). 1900. p. 79.	A9.6:22
Science in, practical, notes on (Abbe). 1897. p. 354.....	A29.6:25
Statistical memoir of (Bödiker). 1874. p. 266.....	A27.9:12
Sugar-beet culture in, notes on (Maxwell). 1890. p. 81.....	A7.3:30
Trichinosis in, general remarks on (Stiles). 1901. p. 9.....	A4.3:30
same, statistical review during 1881-1898 (Stiles). 1901. p. 35.	A4.3:30
same, bibliography of (Hassall). 1901. p. 193.....	A4.3:30
Wool import of (Stern). p. 520.....	A4.1:899
Wool production and manufacture in. 1876. p. 494.....	A27.9:14



<b>Germany—Continued</b>	
<i>See also</i> Baden-Baden — Berlin — Bernburg Agricultural Experiment Station — Brunswick — Canstadt — Cologne — Darmstadt — Frankfort-on-the-Main — Halle — Hamburg — Hanover — Mannheim — Munich — Plauen — Stettin — Strasburg.	
Germination, influence of moisture, temperature, and light conditions on process of (Detmer). 1895. p. 405.....	A29.3:11 <sup>2</sup>
Gettys, W. Cowpeas and corn for silage and fodder. 1900.....	A3.4:24
<b>Ghent, Belgium:</b>	
Agricultural station at, report on. 1885. p. 53.....	A1.8:36
Horticultural school at, report on. 1885. p. 56.....	A1.8:36
Giant beggar weed (Smith). 1899.....	A3.4:13
Giant knot weed or sachaline, circular relative to (Scribner). 1895..	A6.4:5
Giard, M. A. Typhlocyba, parasitic castration of, by larva of hymenopter and of a dipter. 1890. p. 271.....	A9.7:2
Gibbs, William H. Rabies, alleged, in Nebraska, investigation of. p. 188.....	A4.1:897
Gibraltar, United States sausages in (Sprague). p. 519.....	A4.1:899
Gibson, Charles. Phosphoric acid, reverted, differences in determination of, by official method of analysis. 1890. p. 166.....	A7.3:28
Gibson, H. B., Calvert S., and May, David W. Dietary studies at University of Missouri in 1895.....	A10.3:31
Gifford, George. Horses, American, in Switzerland. p. 503.....	A4.1:900
Gift, George W. Cotton under high culture. p. 409.....	A1.1:867
Gilbee, William Armond. Sugar, alcohol in manufacture of, use of. 1891. p. 8.....	A7.3:34
Gilbert, B. D. Cheese industry of State of New York. 1896.....	A4.3:15
Gilbert, Charles Henry. Fishes of Death Valley Expedition, collected in southern California and Nevada in 1891, report on, with descriptions of new species. 1893. p. 229.....	A5.5:7
Gilbert, Grove Karl. Water level of Great Salt Lake. 1901. p. 23.	A29.6:29
<b>Gilbert, Sir Joseph Henry:</b>	
<b>Rothamsted, England—</b>	
agricultural investigations at, during 50 years, six lectures on, delivered under provisions of Lawes agricultural trust. 1893.....	A10.3:22
agricultural investigations at, introduction to six lectures on, delivered under provisions of Lawes agricultural trust. 1894. p. 46.....	A10.3:20
Same, p. 9.....	A10.3:22
<i>See also, as joint author, Lawes, (Sir) John Bennett.</i>	
Gilchrist, James B. Fruit, small, culture of. p. 57.....	A20.1:895
Gilkison, W. F. Industrials [or manual training], practical importance of. 1900. p. 96.....	A10.3:76
Gill, Theodore. Pisciculture, with reference to American waters. p. 394.....	A1.1:866
Gillam, Frank. Washington, D. C., hot summers and cold winters at, 1872-98. p. 456.....	A29.6:26
<b>Gillette, Clarence P.:</b>	
Arsenites and arsenical mixtures as insecticides. 1893. p. 115..	A9.7:6
Codling moth, life-history studies on. 1902. p. 5.....	A9.6:31
Colorado insects, notes on some. 1902. p. 51.....	A9.6:31
Entomological notes from Colorado, report on. 1900. p. 76....	A9.6:26
Entomologists, Economic, objects of Association of. 1900. p. 5.	A9.6:26
Grasshopper disease in Colorado. 1896. p. 89.....	A9.6:6
Insect collections, how shall we improve? 1895. p. 95.....	A9.6:2
<b>Insects—</b>	
few, that have been unusually abundant in Colorado this year. 1897. p. 77.....	A9.6:9
vernacular names of. 1897. p. 32.....	A9.6:9
Iowa Experiment Station, notes on certain experiments and observations at. 1891. p. 258.....	A9.7:3
Lantern trap for insects, successful, report on. 1897. p. 75.....	A9.6:9
Plum curculio and plum gouger, notes on. 1891. p. 227.....	A9.7:3
Tetraopes femoratus fab., oviposition in young forest trees by. 1897. p. 76.....	A9.6:9

# Index

	Classification no.
Gilruth, J. A. Blood poisoning (malignant edema) in sheep and lambs in New Zealand. p. 233 .....	A4.1:901
Ginseng:	
American, commercial history, protection, and cultivation (Nash). Note on. 1885. No. 19. p. 32 .....	A6.3:16 A27.9:23
Gipsy moth:	
Discussion on, at conference held in rooms of committee on agriculture, Boston, Mass., Mar. 4, 1891, report of. 1891. p. 368..	A9.7:3
Imported, report on. 1890. p. 208.....	A9.7:2
Massachusetts—	
in 1891, report upon (Henshaw). p. 75.....	A9.3:26
notes on (Fernald). 1895. p. 59.....	A9.6:2
Recent work against (Forbush). 1898. p. 78.....	A9.6:17
same (Forbush). 1899. p. 104 .....	A9.6:20
Summary account of introduction and spread of <i>Porthetria dispar</i> in Massachusetts, and efforts made by State to repress and exterminate it (Howard). 1897 .....	A9.6:11
Gissler, C. F. See, as translator, Cohn, Ferd. — Koeppen, F. T. — Wagner, Belthasar.	
Githens, John A. Address of, before National Road Conference, July, 1894. p. 5.....	A22.3:10
Glacier as an index of climate, notes on (Abbe). 1901. p. 177.....	A29.6:29
Gladding, —. See, as joint author, Stillwell, —.	
Gladding, Thomas. Guanos, natural, determination of citrate-soluble phosphoric acid in. 1885. p. 16 .....	A7.3:7
Gladding, T. S. Phosphoric acid, discussion on estimation of. 1896. p. 75 .....	A7.3:49
Gladding-Lindo. See Lindo-Gladding.	
Glanders:	
Among horses (Trumbower). p. 418 .....	A4.1:884
same. 1884. p. 237 .....	A4.2:An5
Among horses and mules in Texas (Folsetter). p. 393 .....	A4.1:889-90
Bacilli, composition of (De Schweinitz and Dorset). p. 295 .....	A4.1:898
Etiology and diagnosis of. p. 48 .....	A4.1:887-8
same. pp. 156, 206 .....	A1.1:888
Investigations concerning (De Schweinitz). p. 289 .....	A4.1:898
Investigations of. 1890. p. 94.....	A1.1:890
same. p. 82 .....	A4.1:889-90
Outbreak of, at Miami, Mo. (Trumbower). p. 457.....	A4.1:884
Regulations regarding. 1889. p. 57 .....	A1.1:889
same. p. 15 .....	A4.1:889-90
Report on (Trumbower). p. 452 .....	A4.1:884
Glanders and farcy:	
Definitions of, etc. (Detmers). p. 445 .....	A1.1:878
Horses (Page and Terrell). 1880. p. 202.....	A1.6:22
Report on (Detmers). 1879. p. 257.....	A1.6:12
Glass, Elvin J.:	
Chinook winds. 1902. p. 41.....	A29.3:31
Montana, water supply of, for season of 1900 as depending on snowfall. p. 495 .....	A29.6:28
Northers, cold waves, and heavy snows, possibility of giving warnings of, to stock-raising interests, 48 hours in advance. 1899. p. 35 .....	A29.3:24
Glass:	
Gardening under. 1901. p. 11.....	A1.9:144
Plants under, treatment of mildews upon (Maynard). 1891. p. 16.....	A28.5:6
Glassy-winged sharp shooters, report of. 1893. p. 150.....	A9.7:5
Glenn, Samuel W.:	
Climate and crop correspondents, Weather Bureau; should remarks of, be published in weekly bulletins? 1902. p. 188..	A29.3:31
Snowstorms, memorable, in South Dakota. 1897. p. 15 .....	A29.6:25
Storm-warning messages (Form 1043 C), should [they] be of some distinctive color to more readily attract attention? 1899. p. 53.....	A29.3:24
Globe artichokes. See Bur artichokes.	

	<b>Index</b>
	<b>Classification no.</b>
Gloeosporium nervisequum, report on (Southworth). 1889. p. 51 .	A28.5:5
Glover, Townend:	
Beetles, food and habits of. p. 78 .....	A1.1:868
Entomological exhibition in Paris, Aug. and Sept., 1865. p. 88..	A1.1:865
Entomological record, monthly, Oct.-Dec., 1871, Feb., 1872-Oct., 1875 .....	A27.9:
[The more important articles are indexed under their various subjects.]	
Foreign letters from—	
1st, Aug., 1865. No. 8. p. 6.....	A27.9:3
2d. No. 8. p. 10 .....	A27.9:3
3d. No. 9. p. 6.....	A27.9:3
Life and entomological work of (Dodge). 1888.....	A9.3:18
See also, for reports as Entomologist, Agriculture Department, 1863-77 .....	A9.1:
Glucose, commercial, cane sugar in presence of, report on determination of (Weber and McPherson). 1894. p. 126.....	A7.3:43
Gnats. See Buffalo gnats — Hippelates — Rye gall-gnat — Simulium.	
Goats:	
Breeding and raising of (Diehl). p. 216 .....	A1.1:863
Fleece of, manufacture of. p. 225 .....	A1.1:867
Keeping, for profit (Barnes). 1898. p. 421.....	A1.10:898
Roundworms in, treatment of (Stiles). 1901 .....	A4.4:35
same. 1902. p. 7.....	A4.3:35
Skins of, Dermestes vulpinus in (Jones). 1889. p. 63 .....	A9.7:2
Verminous diseases of, in Texas, 1900 (Stiles). p. 356 .....	A4.1:900
same. 1901 (Stiles). p. 223 .....	A4.1:901
See also Angora goat — Cashmere goat — Rocky Mountain goat.	
Goble, W. F. Grasshoppers, sketch of. 1867. p. 290.....	A27.9:5
Goding, Fredric W. Food-plants of some N. A. Membracidae. 1892. p. 92 .....	A9.7:5
Goff, E. S.:	
Apple scab, treatment of—	
1890. p. 22 .....	A6.3:11
1891. p. 19 .....	A28.5:6
1893. p. 87 .....	A10.3:16
Fungous diseases, treatment of. 1891. p. 17.....	A28.5:7
Gooseberry mildew and apple scab, experiments in treatment of. 1889. p. 33 .....	A28.5:5
Horticulture, laboratory work in—	
1896. p. 103 .....	A10.3:41
1900. p. 95 .....	A10.3:76
1901. p. 132 .....	A10.3:99
Vegetable nomenclature, work of experiment stations in reform of. 1891. p. 47.....	A10.5:3
"Going light." See Asthenia.	
"Golden fleece," Cotswold ram. p. 340 .....	A1.1:866
Golden Gate fair. See Oakland, Cal.	
Goldfinger, Max. Mannheim, Germany, cost of hauling farm products over wagon roads at. p. 9 .....	A22.4:27
Goldmann, F. Volatile acids in butter, determination of total. 1890. p. 112.....	A7.3:24
Gomberg, M. Pine, long-leaf, trees of, resinous contents and their distribution in, chemical study of, before and after tapping for turpentine. 1893. p. 34.....	A13.3:8
Gonioctena, poplar, report on (Cook). 1891. p. 67 .....	A9.7:4
Good Hope, Cape of:	
Animal products of, exports and imports. p. 529.....	A4.1:899
Insects of, notes on (Lounsbury). 1897. p. 34.....	A9.6:9
Good roads, national league for. See Roads.	
Good roads congresses. See Buffalo, N. Y. — Chicago, Ill.	
Good roads conventions. See Houston, Tex. — Richmond, Va. — St. Paul, Minn.	
Goodale, George Lincoln:	
Rainfall and charts of rainfall. 1902. p. 226.....	A29.6:30
Vegetable physiology, suggestions for investigations in. 1897. p. 438 .....	A10.6:7

# Index

	Classification no.
Goodale, S. L.:	
Breeding, physiology of. p. 222 .....	A1.1:862
Cheese, manufacture of, as a staple article of export. p. 381.....	A1.1:863
Goodell, Henry Hill:	
Address of, as president of Association of American Agricultural Colleges and Experiment Stations, at 5th annual meeting. 1891. p. 53 .....	A10.3:7
Agricultural experiment stations, bulletins of, what is mission of? 1895. p. 69.....	A10.3:24
Agriculture, colleges of, what should be taught in? 1896. p. 71.	A10.3:41
<i>See also</i> , as editor of proceedings, Agricultural Colleges and Experiment Stations, American.	
Goodloe, Daniel R.:	
North Carolina, agriculture and climate of. 1867. p. 150 .....	A27.9:5
Southern States, resources and industrial condition of. 1865. p. 102 .....	A1.1:865
Goodrich, C. P. Butter making on farm. 1897 .....	A1.9:57
Goodrich, Reuben. Letter of, to convention of National League for Good Roads, Washington. 1893. p. 82.....	A10.3:14
Gooseberry mildew, experiment in treatment of (Goff). 1889. p. 33.	A28.5:5
Gophers:	
Circular on. 1888 .....	A5.4:9
Depredations of, in northern Iowa and southern Minnesota in fall of 1887 (Fisher). p. 454 .....	A1.1:887
same, p. 454 .....	A5.1:887
<i>See also</i> Florida land tortoise — Pocket gophers.	
Gorgas, Charles S., short biography of (Abbe). 1899. p. 17.....	A29.6:27
Goss, Arthur:	
Beef, report concerning 6.25 protein factor as applied to. 1899. p. 94.....	A7.3:57
Dietary studies in New Mexico .....	A10.3:40
Mineral matter deposited with snow in northern Indiana, Jan. 8, 1892. p. 20 .....	A29.6:20
Nutrition investigations in New Mexico in 1897 .....	A10.3:54
Soils, phosphoric acid in, method for determination of. 1894. p. 58 .....	A7.3:43
same, and potash. 1895. p. 50.....	A7.3:47
Gossard, H. A.:	
Entomology, economic, in Florida, report on. 1901. p. 178 ....	A10.3:99
Florida, observations of insects; experimental work. 1902. p. 129.	A10.3:115
White-fly investigation, review of, with incidental problems. 1902. p. 68.....	A9.6:31
<i>See also</i> , as joint author, Osborn, Herbert.	
Gould, H. P. Fruit growers, practical suggestions for. 1902.....	A1.9:161
Government aid in highway improvement (Brigham). 1902. p. 33.	A22.3:25
Government entomologists. <i>See</i> Entomologists.	
Government in its relation to forests. 1888. p. 23 .....	A13.3:2
Gowdy, John K. Animals, dead, disposition of, in Paris. p. 348..	A4.1:899
Gowell, Gilbert M., and Russell, Fremont L. Dehorning cattle. p. 489.....	A4.1:898
Gowey, John F. American butter in Japan. p. 521.....	A4.1:898
Grackles, food of (Beal). 1900.....	A5.3:13
Graduate study at Washington, D. C.:	
Note on (Abbe). 1902. p. 134.....	A29.6:30
Report of committee of Association of American Agricultural Colleges and Experiment Stations, 1898, on. p. 58.....	A10.3:65
same, 1900 .....	A10.3:99
Grafting grape cuttings (Smith). 1900. p. 9.....	A1.9:122
Graham, John, jr. Convict labor, use of, on public roads. 1895. p. 34.....	A22.3:11
Grain:	
American cereal, insect foes of, with measures for their prevention or destruction (Webster). 1893. p. 146.....	A9.7:6
Austria-Hungary as a factor in world's trade.....	A12.4:19
Birds that injure (Beal). 1897. p. 345.....	A1.10:897
British imports. 1876. pp. 363, 486.....	A27.9:14
Commerce in, 1879-81 (Neumann-Spallart). No. 14. p. 35.....	A27.9:22

**Grain—Continued**

Crops, condition of, June, 1864. No. 3. p. 9 .....	A27.9:2
Cross-breeding of (Watts). 1876. p. 191.....	A27.9:14
English measures. 1863. No. 5. p. 9; No. 6. p. 22 .....	A27.9:1
same. No. 1. p. 35.....	A27.9:2
Ground vs. whole, for chicks. 1898. p. 19.....	A1.9:84
Hemipterous insect punctures affecting (Webster). 1887. p. 54..	A9.3:13
Insects affecting, observations upon (Webster). 1890. p. 42....	A9.3:22
Light vs. heavy, feeding, for milch cows (Allen). 1900. p. 25...	A1.9:119
Markets and crops, foreign, state of. 1864. No. 5. p. 14.....	A27.9:2
New method of treating, by Jensen process for prevention of smut (Galloway). 1891. p. 372 .....	A28.5:7
Odesa, trade in. 1874. p. 144.....	A27.9:13
Proportion of, to straw or stover, effect of fertilizers on. 1897. p. 11.....	A1.9:56
Russia—	
northern. 1870. p. 89 .....	A27.9:8
producing districts of (Moffat). 1882. No. 51. p. 14 .....	A27.9:20
Rusts, investigations of, letter relative to (Dabney). 1894.....	A28.4:14
Small, insects affecting (Webster). p. 573.....	A1.1:886
Smuts in, cause and prevention (Swingle). 1894. p. 409.....	A1.10:894
same. 1898 .....	A1.9:75
Stored—	
insects injurious to (Chittenden). 1896.....	A1.9:45
more important insects injurious to (Chittenden). 1894. p. 277 .....	A1.10:894
Tillering of (Schulte). 1899. p. 10 .....	A1.9:105
Winter, condition of—	
1869. p. 119 .....	A27.9:7
1870. pp. 19, 113.....	A27.9:8
1871. pp. 95, 468.....	A27.9:9
1872. p. 105 .....	A27.9:10
1874. p. 15 .....	A27.9:12
1882. Nos. 42, 43.....	A27.9:20
1883. p. 59 .....	A27.9:21
World's crop in 1899 .....	A27.4:11
Yield of, per acre—	
1884. No. 12.....	A27.9:22
1885. No. 23.....	A27.9:23
1886. No. 34.....	A27.9:24
1887. No. 45.....	A27.9:25
1888. No. 56.....	A27.9:26
1889. No. 67.....	A27.9:27
1890. No. 78.....	A27.9:28
1891. No. 89.....	A27.9:29
1892. No. 98C .....	A27.9:30
<i>See also</i> Algerian durum wheats—Barley—Cereals—Corn— Emmer—Flour and grain—Gram—Macaroni wheats— Maize—Oats—Red clover seed—Rice—Runner's white corn—Rye—Wheat.	
Grain joint-worm flies. <i>See</i> Grass and grain joint-worm flies.	
Grain louse, southern (Pergande). 1902. p. 7 .....	A9.6:38
Grain moth, Angoumois, or fly weevil (Howard). 1893. p. 325....	A9.7:5
Grain plant-louse, some new parasites of (Howard). 1890. p. 246 ..	A9.7:2
Grain Toxoptera, notes on (Webster). 1892. p. 245 .....	A9.7:4
Gram, chick-pea or Idaho pea (Smith). 1898 .....	A3.4:7
Gramineæ (grass family) of western Texas, description of (Dewey). 1894. p. 484 .....	A6.5:2
"Gran cultura" in Puerto Rico, notes on (Abbe). 1899. p. 548....	A29.6:27
Granada, Nicaragua, rainfall of (Henry). 1898. pp. 162, 305.....	A29.6:26
Grand Valley, Colorado, irrigation in, 1901 (Stover). 1902. p. 265.	A10.3:119
Grandeau, L. Russia, black soil of. 1872. p. 501 .....	A27.9:10
Grandeau's method for determination of humus, modification of (Huston and McBride). 1893. p. 84.....	A7.3:38
Grange, origin, progress, and purposes, address on (Aiken). 1883. p. 56.....	A1.7:2
Same .....	A1.6:55

# Index

	Classification no.
Granges, State, officers of:	
1900. p. 672 .....	A1.10:900
1901. p. 638 .....	A1.10:901
Grape:	
American, improvement of. 1901. p. 16 .....	A1.9:144
Black-rot, brown-rot, downy mildew, powdery mildew, and an- thrachnose of, treatment of (Galloway). 1891. p. 11.....	A28.5:6
Black-rot of, experiment in treatment of (Galloway). 1889. p. 204 .....	A28.5:5
<i>See also</i> Grape, downy-mildew — Grape mildew — Grapevines.	
California products. 1887. p. 583.....	A27.9:25
Chemical analysis of (Wetherill). 1862.....	A1.8:3
same. 1866. p. 337 .....	A27.9:4
Cuttings, grafting (Smith). 1900. p. 9.....	A1.9:122
Diseases of—	
Europe; origin, history, phenomena, and cure (Erni). p. 324.	A1.1:865
Pacific coast (Pierce). 1895 .....	A1.9:30
western New York (Fairchild). 1891. p. 95.....	A28.5:6
<i>See also</i> Grape mildew.	
Downy mildew and anthracnose, circular asking questions re- garding (Willits) .....	A28.4:11
Downy mildew and black-rot of, treatment of—	
1885 .....	A28.4:1
1887 .....	A28.4:3
1889 .....	A28.4:6
<i>See also</i> Grape, black rot — Grape mildew — Grapevine.	
Fungous diseases of—	
and their treatment (Galloway). 1891 .....	A1.9:4
treatment of (Howell). 1889. p. 49.....	A6.3:11
Growing at the West (Thompson). p. 115.....	A1.1:866
Growing in South (Tracy). 1900.....	A1.9:118
Improvement by hybridizing, cross-breeding, and seedlings (Campbell). p. 209 .....	A1.1:862
Insect enemies, principal, of (Marlatt)—	
1895. p. 385 .....	A1.10:895
1898 .....	A1.9:70
1900 (excerpt.), p. 27 .....	A1.9:118
Insects injurious to (Rathvon). 1868. p. 452.....	A27.9:6
Isabella, in South America. 1866. p. 426 .....	A27.9:4
Juice of—	
preservation of. 1898. p. 29.....	A1.9:78
unfermented, preparation of (Beal). 1900. p. 27 .....	A1.9:122
Leaf-tyer of (Chittenden). 1898. p. 82.....	A9.6:18
Native, improvement of, by seedlings and hybridization (Parker). p. 122.....	A1.1:864
New varieties of (Parker). p. 194 .....	A1.1:865
Phylloxera of, notes on (Riley). p. 405.....	A1.1:884
Popular varieties of (Elliott). p. 119 .....	A1.1:863
Pruning and training of (Lodeman). 1896. p. 499.....	A1.10:896
Raisin, cultivation of, by irrigation (Eisen). 1891. p. 225.....	A15.2:P94 <sup>1</sup>
Ripe, rot of (Southworth). 1891. p. 164.....	A28.5:6
Scuppernong, letter on (Froelich). 1868. p. 449.....	A27.9:6
Wild, of North America, classification and generic synopsis of (Munson). 1890 .....	A20.3:3
Grape bags, use of, by paper-making wasp (Murtfeldt). 1891. p. 192 .....	A9.7:4
Grape culture:	
California, present condition of (Husmann). 1898. p. 551.....	A1.10:898
Near Washington, D. C. 1873. p. 282.....	A27.9:11
Report on, in U. S.—	
1863 (Flint). p. 147 .....	A1.1:863
1868. p. 207 .....	A1.1:868
Wine-making and, in El Paso del Norte (Pierson). 1873.....	A27.9:11
Wine production and, in U. S., for 1880, report on statistics of (McMurtrie). 1881.....	A1.6:36
Grape fungi, microscopic observations of (Taylor). 1876. p. 464...	A27.9:14



	<b>Index</b>
	<b>Classification no.</b>
<b>Grape mildew:</b>	
Action of sulphate of copper on (Lafitte). 1886. p. 100.....	A6.3:2
Alkaline polysulphides for, use of (Montlaur). 1885. p. 67.....	A6.3:2
Copper-soda and copper-gypsum as remedies for (Nessler). 1891. p. 73.....	A28.5:6
Destruction of, by sulphate of copper (Perrey). 1886. p. 89....	A6.3:2
<b>Grape rot and—</b>	
remarks on (Pearson). 1886. p. 54.....	A6.3:2
synopsis of replies to circular relative to, in U. S. (Smith). 1886. p. 45.....	A6.3:2
treatment of (Millardet). 1885. p. 94.....	A6.3:2
Paper on. 1867. p. 330 .....	A27.9:5
Prevention of, practical treatments for (Foëx). 1886. p. 113 ...	A6.3:2
Remedy for (Vergnette-Lamotte). 1886. p. 80.....	A6.3:2
Search for copper on grapevines treated with lime and sulphate of copper mixture and in harvest (Millardet and Gayon). 1885. p. 116.....	A6.3:2
<b>Treatment of—</b>	
in Médoc, report of minister of agriculture on (Prillieux). 1886. p. 83 .....	A6.3:2
mixture of sulphate of copper and lime (Millardet and Gayon). 1885. p. 108 .....	A6.3:2
sulphate of copper (Muntz). 1886. p. 92.....	A6.3:2
<i>See also</i> Grapes, downy mildew—Grape vine—Ferrouillat, Paul.	
<b>Grape must, unfermented, manufacture and preservation of (Hus-</b> <b>mann). 1902.....</b>	A19.3:24
<b>Grape vine:</b>	
American, climatology of (Lippincott). p. 194.....	A1.1:862
Black-rot and brown-rot in northern Ohio in 1889, treatment of (Scribner). p. 76 .....	A6.3:11
Black-rot and mildew of, experiments in treatment of (Holladay). 1890. p. 70.....	A6.3:11
Black-rot of (Scribner and Viala) .....	A6.3:7
same, in France (Frechou). 1890. p. 88 .....	A6.3:11
Coleopterous enemies of, some (Chittenden). 1895. p. 384.....	A9.7:7
Cultivation of, in Germany, France, and U. S. (Bossert). p. 156.	A1.1:863
Diseases of, distribution of (Galloway) .....	A28.4:7
<b>Downy mildew and black-rot of—</b>	
experiments made in 1887 in the treatment of, with chapter on apparatus for applying remedies for these diseases (Scribner).....	A6.3:5
same, 1888 (Scribner) .....	A6.3:10
volunteer reports on treatment of, in 1887. p. 37 .....	A6.3:5
same, 1889. p. 8.....	A6.3:11
<i>See also</i> Howell, A. M.—Jaeger, Hermann—Lyman, H. L.— Munson, T. V.—Pearson, Alexander W.	
Downy-mildew of, treatment for, in France in 1887. p. 75 .....	A6.3:5
Fungus diseases of (Scribner). 1886 .....	A6.3:2
Girdling or ringing, operation of (Beal). 1899. p. 17 .....	A1.9:105
Mildew on, effects of, and influence of efficient treatment. (Mil- lardet and Gayon). 1885. p. 97 .....	A6.3:2
Mildew and black-rot. 1885 .....	A28.4:2
Parasitic diseases of, results of congress on, held at Florence, Italy, Oct., 1886. p. 119 .....	A6.3:2
Peronospora of, first results obtained from use of chloride of aluminium and proposal of new remedies against (Comes and Deperais) 1890. p. 94 .....	A6.3:11
Pruning and training, remarks on, with quotations and illustra- tions from various authors (Saunders). p. 97.....	A1.1:866
Treated with lime and sulphate of copper mixture, search for cop- per on (Millardet and Gayon) 1885. p. 116 .....	A6.3:2
<i>See also</i> Ferrouillat, Paul—Grape—Grape mildew—Vine.	
Grape-vine hopper, history of (Glover). 1871. p. 403.....	A27.9:9
Graphics, agricultural, of U. S., album of. 1890 .....	A27.2:G76
Graptodera foliacea, life-history of (Murtfeldt). 1888. p. 74.....	A9.7:1

# Index

	Classification no.
Grass and grain joint-worm flies and their allies, a consideration of some North American phytophagic eurytominae (Howard). 1896 .....	A9.8:2
Grass experiment stations, necessity for (Vasey). 1885. p. 168 ....	A1.7:9
See also Garden City, Kans.	
Grass gardens:	
Experimental (Smith). 1895 .....	A3.4:1
Methods and purposes (Hays). 1893. p. 130 .....	A10.3:16
Report on (Scribner). 1895. p. 301 .....	A1.10:895
Grass insects in Washington, D. C., notes on (Osborn). 1891. p. 197 .....	A9.7:4
Grass lands:	
Liming (Beal and Smith). 1900. p. 5 .....	A1.9:122
Seeding, without a nurse crop. 1898. p. 11 .....	A1.9:79
Grass saw-flies, notes on (Riley and Marlatt). 1891. p. 168 .....	A9.7:4
Grass seed and its impurities (Hicks). 1898. p. 473 .....	A1.10:898
Grass seeds:	
Collection and distribution of (Shear). 1900 .....	A1.4:9
Number, weight, cost of, and amount to sow per acre—	
1895. p. 612 .....	A1.10:895
1896. p. 632 .....	A1.10:896
1897. p. 670 .....	A1.10:897
Grass stations, cooperative:	
In South (Tracy). p. 344 .....	A1.1:891
same, p. 344 .....	A6.1:891
In West and Southwest (McLaren). p. 344 .....	A1.1:891
same, p. 344 .....	A6.1:891
Grasserie of silk-worm (Walker). 1891. p. 445 .....	A9.7:3
Grasses:	
American, chemical composition of, from investigations in laboratory of Department of Agriculture, 1878-82 (Richardson). p. 117 .....	A1.8:32
American, No. 1, description of, tribes and genera (Scribner) ....	A3.3:7
same, No. 2 (Scribner) .....	A3.3:17
same, No. 3 (Scribner) .....	A3.3:20
Arizona (Merrill). 1901 .....	A3.4:32
Caryopsis of, structure of, with reference to their morphology and classification (Kennedy) .....	A3.3:19
Collected by Dr. E. Palmer in vicinity of Acapulco, Mexico (Scribner). 1897. p. 7 .....	A3.3:4
Condition of, monthly notes on .....	A27.9:
Contributions from U. S. National Herbarium .....	A6.5:
Cutting, curing, and hauling of. 1864. No. 4. p. 6 .....	A27.9:3
Economic (Scribner) .....	A3.3:14
Exhibited at New Orleans, 1885, descriptive catalogue of (Vasey). .....	A6.2:G76
Fertilization of (Vasey). 1873. p. 247 .....	A27.9:11
Fodder plants and, on Potomac Flats (Ball). 1900 .....	A3.4:28
Herbarium of Dr. H. Muhlenberg (Scribner and Merrill). 1900 ..	A3.4:27
Insects affecting (Webster). p. 573 .....	A1.1:886
Kansas, Nebraska, and Colorado, arid districts of (Vasey). 1886 ..	A6.3:1
Mexico, new, from, description of (Vasey). 1893. p. 281 .....	A6.5:1
Needed for agriculture in U. S. (Vasey). 1885. p. 168 .....	A1.7:9
New Mexico, Arizona, Nevada, and Utah, arid districts of, investigation of, in 1887 (Tracy). p. 5 .....	A6.3:6
New or little known—	
circular on. 1901 .....	A3.4:30
description of (Scribner)—	
1897. p. 5 .....	A3.3:8
1898. p. 42 .....	A3.3:11
New or noteworthy, from U. S., descriptions of (Vasey). 1893. p. 267 .....	A6.5:1
New species, miscellaneous notes and descriptions of. p. 36 .....	A3.3:4
same (Scribner and Ball). 1900. p. 39 .....	A3.3:24
Nomenclature notes. p. 9 .....	A3.4:27
Nomenclature of, some changes in (Merrill). 1901. p. 5 .....	A3.4:35
North American —	
illustrations of (Vasey). 2 vols .....	A6.2:N82

**Grasses—Continued**

**North American—Continued**

- new species of (Scribner). 1899..... A3.4:9  
 same (Scribner). 1899..... A3.4:16  
 Pacific slope, including Alaska and adjacent islands. 2 pts.  
 (Vasey)..... A6.3:13.  
 same, reissued. 1893..... A6.2:N82<sup>2</sup>  
 Plains and eastern slope of Rocky Mountains, catalogue of. p. 217. A1.1:870  
 Rocky Mountain (Vasey). 1874. p. 154..... A27.9:12  
 Salt marshes (Scribner). 1895. p. 325..... A1.10:895  
 Sand and soil binders (Scribner). 1894. pp. 421, 580..... A1.10:894  
 Sand-binding (Scribner). 1898. p. 405..... A1.10:898  
 Shifting soil, grasses for fixing (Vasey). 1872. p. 223..... A27.9:10  
 Some species of, published by S. B. Buckley (Merrill). 1901.... A3.4:35  
 South; report on certain grasses and forage plants for cultivation  
 in South and Southwest (Vasey). 1887..... A6.3:3  
 South Carolina and Georgia, in Elliott's sketch (Scribner). 1901. A3.4:29  
 Southern States (Vasey). 1874. p. 379..... A27.9:12  
 Southwest. 2 pts. (Vasey)..... A6.3:12  
 same, reissued. 1891..... A6.2:N82<sup>1</sup>  
 Stems of some, notes on some species of insects which affect upper  
 portion of (Webster). 1889. p. 372..... A9.7:1  
 United States—  
 being synopsis of tribes and genera, with descriptions of genera,  
 and list of species (Vasey). 1883..... A1.6:63  
 British America and, monograph of (Vasey). 1892. p. 1.... A6.5:3  
 descriptive catalogue of, including especially grass collec-  
 tions at New Orleans Exposition, 1885 (Vasey)..... A6.2:G76  
 Useful and ornamental (Scribner). 1896..... A3.3:3

*See also* Agricultural grasses and forage plants—Agropyron—Agrostology—Agrostology Division—Aristida purpurea nutt—Bear grass—Beardless brome-grass—Bermuda grass—Blue grass—Brome grass—Bromus—Broom corn—Calamagrostis—Chætochloa—Chess—Clover—Crimson clover—Earth almond—Eragrostis obtusiflora—Ergot—Esparto grass—Forage plants—Giant knotweed—Gramineæ—Hordeum—Hungarian brome grass—Hungarian grass—Ixophorus—Johnson grass—Kafir corn—Melica—Mexican grasses—Millets—North American grasses—Nut grass—Orchard grass—Pacific slope grasses—Panicum nashianum—Panicum nitidum—Panicums—Poa—Poa fendleriana—Ramie or Chinagrass—Range grass—Rescue grass—Rocky Mountain grasses—Sitanion—Smooth broom-grass—Spartina—Timothy.

**Grasses and forage plants:**

- Cooperative experiments with (Kennedy). 1900..... A3.3:22  
 Dakotas (Williams). 1897..... A3.3:6  
 Forage conditions of eastern Rocky Mountain region and (Williams). 1898..... A3.3:12  
 Insects affecting, methods of treating (Osborn). 1893. p. 71.... A9.7:6  
 Investigations with, cooperative work of Department of Agriculture with State experiment stations—  
 1900 (Williams)..... A1.4:8  
 1901 (Williams). p. 148..... A10.3:99  
 1902 (Lyon). p. 71..... A10.3:115  
 Iowa, Nebraska, and Colorado, notes on (Pammel). 1897..... A3.3:9  
 Report on (Vasey and Collier). p. 157..... A1.1:878  
 Rocky Mountain region (Rydberg and Shear). 1897..... A3.3:5  
 Seed distribution and cooperative experiments with, records of  
 (Scribner). 1902..... A19.3:10  
 Southeastern States, notes on (Kearney). 1895..... A3.3:1  
 Stock ranges of northwestern California (Davy). 1902..... A19.3:12  
 Tables giving number of grains in 1 pound of seed, etc. 1894.  
 p. 569..... A1.10:894  
 Texas, central (Bentley). 1898..... A3.3:10  
 Year 1901 (Spillman). 1901. p. 672..... A1.10:901  
*See also* Forage plants.

## Index

	Classification no.
Grasses and Forage Plants Investigations, Office of, list of publications of (Spillman). 1902.....	A19.2:P96
Grasshopper mouse, descriptions of two new species and one new subspecies of (Merriam). 1889. p. 1.....	A5.5:2
Grasshoppers:	
Damages from, reported, trip to Kansas to investigate, paper read before Association of Economic Entomologists, 1891 (Osborn). p. 58 .....	A9.3:27
same, report on (Osborn). 1891. p. 49 .....	A9.7:4
Destructive, in California. 1872. p. 22.....	A27.9:10
Differential, in Mississippi delta (Morgan). p. 7.....	A9.6:30
Disease of, in Colorado (Gillette). 1896. p. 89.....	A9.6:6
Fungous diseases of, experimental work with (Howard). 1901. p. 459.....	A1.10:901
Hateful, or Colorado ( <i>Caloptenus spretus</i> ), information relating to. 1870. p. 81.....	A27.9:8
Idaho, outbreak of (Bruner). 1890. p. 135.....	A9.7:3
Injuries from, in northwest Missouri, report on trip to investigate (Osborn). 1893. p. 323 .....	A9.7:5
Large, note on (Glover). 1872. p. 497.....	A27.9:10
North Dakota (Waldron). 1892. p. 13.....	A9.3:27
Notes for 1901 (Bruner). 1902. p. 39 .....	A9.6:38
Outlook for, 1892. p. 321 .....	A9.7:4
Report on, for 1895 (Bruner). p. 31.....	A9.6:7
same, 1896 (Bruner). p. 36 .....	A9.6:7
Sketch of (Goble). 1867. p. 290.....	A27.9:5
Western, suggestions regarding (Driscoll). 1869. p. 145.....	A27.9:7
Wingless, of Utah (Glover). 1872. p. 74.....	A27.9:10
<i>See also</i> Cicada—Locusts—Rocky Mountain locust.	
Gravel roads. <i>See</i> Roads.	
Gravelius, H. Rainfall and charts of rainfall. 1902. p. 228.....	A29.6:30
Graves, Henry Solon:	
Forestry, practice of, by private owners. p. 415 .....	A1.10:899
Practical forestry in Adirondacks. 1899.....	A13.3:26
Wood lot belonging to E. D. Page, at Oakland, Bergen County, N. J., working plan for. 1898. p. 301.....	A1.10:898
Woodsman's handbook. 1902. pt. 1 .....	A13.3:36
Graves, John C. Address of welcome, at international good roads congress held at Buffalo, N. Y., Sept. 16-21, 1901. p. 9.....	A22.3:21
Gravimetric method, process for estimating fat in milk by (Dietrich). 1890. p. 159.....	A7.3:24
Gravity:	
Standard, reduction to, notes on (Abbe). 1898. p. 550.....	A29.6:26
Terrestrial, variation of, over the ocean (Abbe). 1902. p. 370 ..	A29.6:30
Gray, James J. Tornado and waterspout at Norfolk, Va., on Aug. 6, 1901. p. 372 .....	A29.6:29
Gray hair-streak butterfly and its damage to beans. 1895. p. 354 ..	A9.7:7
Grazing:	
Forest reserves (Roth). 1901. p. 333.....	A1.10:901
Problems in, in Southwest, and how to meet them (Smith). 1899.	A3.3:16
Rainfall and, notes on (Abbe). 1901. p. 176 .....	A29.6:29
Great Basin, northern border of, forage conditions on (Griffiths). 1902 .....	A19.3:15
Great Britain:	
Agricultural education in, 1865. No. 2. p. 8 .....	A27.9:3
Agricultural imports of, 1869-70. p. 143 .....	A27.9:8
Agricultural statistics of—	
1866. p. 340 .....	A27.9:4
1867. pp. 58, 379.....	A27.9:5
1868. p. 407 .....	A27.9:6
1868. p. 66 .....	A27.9:7
1869-70. p. 142 .....	A27.9:9
1875. p. 113 .....	A27.9:14
1876. p. 483 .....	A27.9:14
Agriculture, facts in. 1876. p. 201.....	A27.9:14
American animals and animal productions in (Wray). p. 440 ...	A4.1:898

Great Britain—Continued

American cattle in, inspection of. p. 82.....	A1.1:890
same. p. 70.....	A4.1:889-90
American horse trade of (Wellman). 1897. p. 45.....	A1.2:H78
Animals and animal products, imports into. 1900. p. 411.....	A4.1:899
Animals in, contagious diseases of. p. 37.....	A4.1:895-6
Breadstuffs in, imports of, 1863-64. p. 35. No. 1.....	A27.9:3
same, 1874-75. p. 460.....	A27.9:13
Cattle in—	
consumption and production of. 1865. No. 7. p. 27.....	A27.9:3
disease statistics of. 1883. No. 6. p. 34.....	A27.9:22
imports of, 1898-1900. p. 606.....	A4.1:901
pleuro-pneumonia in (Reid). 1891. p. 401.....	A4.1:889-90
Cattle plague in, 1865. No. 8. p. 20.....	A27.9:3
Cavalry horses purchased by, in Argentina (Buchanan). 1898. p. 22.....	A1.2:H78
Climate of British Islands (Harding). 1896. p. 611.....	A29.3:11 <sup>s</sup>
Colonies of, agricultural statistics of. 1870. p. 291.....	A27.9:8
same. 1875. p. 455.....	A27.9:13
Cotton importations of—	
1866-67. p. 279.....	A27.9:5
1868. p. 459.....	A27.9:6
1869. p. 147.....	A27.9:7
1870-71. p. 324.....	A27.9:9
Cotton trade, 1866-67. p. 378.....	A27.9:5
Crop acreage and live stock in. 1875. p. 60.....	A27.9:14
Dogs in, muzzling of (Mason). p. 521.....	A4.1:900
Eggs, poultry, and meat in (Halstead). p. 508.....	A4.1:900
Ensilage in. 1885. p. 34. No. 24.....	A27.9:23
Farms, increased production of. 1873. p. 488.....	A27.9:11
Flour, imports into, 1868. p. 39.....	A27.9:6
same, 1875-76. p. 486.....	A27.9:14
Food supply. 1871. p. 476.....	A27.9:9
Grain imports. 1876. p. 363.....	A27.9:14
same, 1875-76. p. 486.....	A27.9:14
Guano in, consumption of, 1854-63. No. 6. p. 29.....	A27.9:3
Harvest in. 1863. No. 2. p. 7.....	A27.9:2
Hay in. 1894. p. 145.....	A27.9:33
Horse trade with (Wray). 1898. p. 50.....	A1.2:H78
Imports of—	
1865-66. p. 243.....	A27.9:4
1866. Jan. to July. p. 338.....	A27.9:4
1870. p. 276.....	A27.9:8
1870-71. p. 205.....	A27.9:10
Land holdings and allotments in, 1875-90. p. 574.....	A27.9:28
Liquid sewage in, treatment of. 1870. p. 437.....	A27.9:8
Live-stock production. 1876. p. 417.....	A27.9:14
same. 1895. p. 22.....	A27.9:33
Locust swarms on coast of (Swinton). 1883. App. p. 57.....	A8.1:3
Manures in. 1868. p. 38.....	A27.9:6
Markets for American products in. 1895.....	A12.3:1
Meteorology in, notes on (Abbe). 1899. p. 109.....	A29.6:27
Mineral production. 1873. p. 531.....	A27.9:12
Plows in, improvement of. 1871. p. 67.....	A27.9:9
Potatoes in. 1894. p. 145.....	A27.9:33
Produce of, prices of, 1860-64. No. 6. p. 34.....	A27.9:2
Revenue of, source of—	
1866. p. 387.....	A27.9:4
1866-67. p. 249.....	A27.9:5
1870. p. 143.....	A27.9:9
Rinderpest in, statistics of. 1866. p. 432.....	A27.9:4
Russian wheat, imports of, 1852-67. p. 39.....	A27.9:6
Sheep, imports of, 1898-1900. p. 606.....	A4.1:901
Sheep of (Carman). p. 145.....	A4.1:889-90
Textile materials, imports and exports of, 1863 and 1864. No. 5. p. 36.....	A27.9:2
same, 1863 and 1864. No. 5. p. 27.....	A27.9:3

# Index

	Classification no.
Great Britain—Continued	
Trade between U. S. and, falling off of. 1865. No. 5. p. 32....	A27.9:3
Wheat—	
consumption and production of. 1865. No. 7. p. 27.....	A27.9:3
importations of—	
1868. p. 459 .....	A27.9:6
1869. p. 147 .....	A27.9:7
1870-71. p. 324 .....	A27.9:9
1873-74. p. 45 .....	A27.9:13
supply, 1872-86. p. 641.....	A27.9:25
<i>See also</i> England—Hongkong—India—Malta—Mauritius.	
Great Eastern Canal, Platte County, Nebr. Irrigation under, 1900	
(Stout). p. 195.....	A10.3:104
Same. 1901 (Stout). p. 299 .....	A10.3:119
Great Lakes:	
Aneroid barograph on, instructions for use of. 1897 .....	A29.12:An3
Commerce on, and its relation to Weather Bureau (Abbe). 1900.	
p. 17 .....	A29.6:28
Current chart of. 1892.....	A29.2:C93
Currents of, as deduced from movement of bottle papers, 1892 and	
1893 (Harrington) .....	A29.5:B
Display of wind signals on.....	A29.2:G81 <sup>1</sup>
Meteorological charts of.....	A29.13:
Meteorological observations on, monthly, Sept., 1893-Dec., 1894..	A29.6:
Periodic fluctuations of the, notes on (Abbe). 1898. p. 261 ....	A29.6:26
Precipitation, normal, in region of (Henry). 1899. p. 151 ....	A29.6:27
Rainfall and outflow of the (Abbe). 1898. pp. 164, 215.....	A29.6:26
Section map of. 1892.....	A29.2:G81 <sup>8</sup>
Storm signals on (Cox). 1899. p. 152.....	A29.3:24
Storm waves on (Abbe). 1895. p. 341.....	A29.6:23
Water level in the, fluctuation of (Guthrie). 1896. p. 420.....	A29.6:23
Water temperatures of (Conger). 1899. p. 352 .....	A29.6:27
Waterspouts on, notes on (Abbe). 1898. p. 364 .....	A29.6:26
Weather forecasts best calculated to aid maritime interests of;	
method of reaching those interested (Cox). 1899. p. 19...	A29.3:24
same (Conger). 1899. p. 20 .....	A29.3:24
Wreck and casualty chart of. 1894.....	A29.2:G81 <sup>8</sup>
Wreck charts of.....	A29.2:G81 <sup>1</sup>
Wrecks and casualties on, during 1895, 1896, 1897 (Conger). 1898.	A29.2:G81
Wrecks which occurred on, Dec. 17, 1885, to Nov. 15, 1893 .....	A29.2:G81 <sup>5</sup>
Great Plains:	
Artesian and underflow investigation of, progress report on central	
division (Gregory). 1891. p. 145 .....	A15.2:P94 <sup>1</sup>
Artesian wells upon, report of geological commission (White and	
Aughey). 1882 .....	A1.8:19
Irrigation on (Newell). 1896. p. 167.....	A1.10:896
Prairie dog of (Merriam). 1901. p. 257 .....	A1.10:901
Underwaters of (Gregory). 1893. pt. 4, p. 3 .....	A15.2:Ir7 <sup>2</sup>
Great Salt Lake:	
Basin of, description of. p. 559.....	A1.1:870
Rainfall and evaporation of, notes on 1874-1900 (Abbe), p. 68....	A29.6:29
Water level of, relation of, to precipitation—	
1901 (Murdock). p. 22 .....	A29.6:29
1901 (Gilbert). p. 23.....	A29.6:29
1901 (Mackie). p. 57.....	A29.6:29
Greathouse, Charles Howard:	
Agricultural libraries, development of. 1899. p. 491.....	A1.10:899
Agriculture Department, historical sketch of, its objects and	
present organization.....	A21.3:3
Rural mails, free delivery of. p. 513.....	A1.10:900
Vegetable garden. 1899.....	A1.9:94
Yearbooks of Agriculture Department, index to. 1902 .....	A21.3:7
Green, Edward M. Horses in France. 1898. p. 39.....	A1.2:H78
Green, J. L. Tanana Valley, Alaska, notes on. p. 309 .....	A10.1 <sup>2</sup> :901
Green, Seth. Fish culture, improvements and increase in. p. 248..	A1.1:872
Green, Samuel B. Horticultural education in Minnesota. 1898.	
p. 84 .....	A10.3:49



	<b>Index</b>
	<b>Classification no.</b>
Green, W. J. Plants, variety testing, methods of work in. 1891. p. 49.	A10.5:3
Green clover worm (Chittenden). p. 45 .....	A9.6:30
Green June beetle. <i>See</i> Fig-eater.	
Green manuring and manures (Walfinger). p. 299.....	A1.1:864
Green materials. <i>See</i> Fodders.	
Green pea louse, destructive:	
Circular on. 1901 .....	A9.5:43
For 1900, notes upon (Johnson). 1900. p. 55.....	A9.6:26
Greene, Francis Vinton. Roads, address on. 1895. p. 34.....	A22.3:17
Greenewald, (Mrs.) L. H. Weather observers, voluntary, how best to secure and retain services of. 1896. p. 42.....	A29.3:18
Greenhouses:	
Health of plants in (Galloway). 1895. p. 247 .....	A1.10:895
Heating, merits of steam and hot water. 1898. p. 12.....	A1.9:69
Irrigation for (Taft). 1895. p. 233.....	A1.10:895
Mealy bugs in, experiments with hydrocyanic-acid gas as means of exterminating (Hemenway). 1900. p. 69.....	A9.6:22
Subwatering in, tests of. 1898. p. 21.....	A1.9:78
Utilizing, in summer. 1901. p. 18 .....	A1.9:133
Greenhouses and cold frames, hydrocyanic gas for fumigating, use of (Woods and Dorsett) .....	A9.5:37
Greensand marl as manure. 1867. p. 368 .....	A27.9:5
Same, p. 30.....	A27.9:6
Greenwich noon, notes on (Abbe). 1898. p. 67 .....	A29.6:26
Gregg, Thos. Fruit culture on the Mississippi rapids. 1869. p. 225.	A27.9:7
Gregory, John Walter:	
Artesian and underflow investigation, progress report on central division of Great Plains. 1891. p. 145.....	A15.2:P94 <sup>1</sup>
Artesian well investigation, field agents report for middle division. 1890. p. 145 .....	A15.2:Ar7
Underwaters of Great Plains; final report of mid-plains division of artesian and underflow investigation. 1893. pt. 4. p. 3 ..	A15.2:Ir7 <sup>2</sup>
Grete, A. Switzerland, agricultural investigation in. 1896. p. 681.	A10.6:6
Griffiths, David:	
Forage conditions on northern border of Great Basin, being investigations made during July and Aug., 1901, in region between Winnemucca, Nev., and Ontario, Oreg. 1902.....	A19.3:15
Range improvement in Arizona. 1901 .....	A19.3:4
Griffith, P. Merrill. Mexican cattle industry. p. 503.....	A4.1:900
Grignon agricultural experiment station, investigations at (Demoussy). 1895. p. 3.....	A10.6:5
Grimbert, ——. <i>See</i> , as joint author, Jungfleisch, ——.	
Grindley, H. S., and Sammis, J. L. Dietary studies at University of Illinois. 1901. p. 7 .....	A10.3:91
Grindley, H. S., McCormack, H., and Porter, H. C. Meat, losses in cooking, experiments on, 1898-1900 .....	A10.3:102
Grinnell, J. B.:	
Cattle industry, report on. 1883. p. 232 .....	A1.7:2
Cattle interests west of Mississippi River. p. 233 .....	A4.1:884
Sheep on prairies. p. 300 .....	A1.1:862
Groat, B. F. Tornado, force of, report on. 1899. p. 305.....	A29.6:27
Grosbeak, rose-breasted, an enemy of Colorado beetle or potato bug, special report on. 1889. p. 535 .....	A1.1:888
Same, p. 535.....	A5.1:888
Grote, A. R. Insects injurious to the cotton plant in Georgia and Florida. 1878. p. 351.....	A9.2:C82
Ground:	
Surface of, temperature of (Seeley). 1901. p. 501.....	A29.6:29
Temperature of, observations at St. Ignatius College, Cleveland, Ohio (Briggs). 1902. p. 301 .....	A29.6:30
Ground squirrels:	
Five new, of genus <i>Tamias</i> , descriptions of (Merriam). 1890. p. 17.	A5.5:4
New species of, from arid lands of the Southwest, description of (Merriam). 1889. p. 19 .....	A5.5:2
Three new, of <i>Spermophilus spilosoma</i> group, descriptions of (Merriam). 1890. p. 37.....	A5.5:4
<i>See also</i> Squirrels.	

# Index

	Classification no.
Ground-water on Wisconsin Agricultural Experiment Station farm, observations and experiments on fluctuations in level and rate of movement on (King). 1892 .....	A29.3:5
Grout, John H., jr.:	
Animals and animal products in Malta. p. 520 .....	A4.1:898
Malta, weather and storms of, during October, 1898. p. 546 .....	A29.6:26
Grout, Josiah. Vermont, road improvement in, extract from governor's message. p. 13 .....	A22.4:33
Grub supposed to have traveled in human body. 1890. p. 238 .....	A9.7:2
<i>See also</i> White grubs.	
Grunsky, Carl Ewald:	
Water, methods of applying, to land in central California. 1891. Pt. 1, p. 307 .....	A15.2:Ir7 <sup>2</sup>
Water appropriation from Kings River, California. 1901. p. 259 .....	A10.3:100
Guadalupe Island, Oceanica. List of plants collected by Edward Palmer at, in 1889 (Vasey and Rose). 1890. p. 21 .....	A6.5:1
Guanos:	
Consumption of, in Great Britain, 1854-63. No. 6. p. 29 .....	A27.9:3
Natural, determination of citrate-soluble phosphoric acid in (Glad- ding). 1885. p. 16 .....	A7.3:7
<i>See also</i> Bats, excrement of.	
Guatemala. Coffee culture in. 1889. p. 175 .....	A27.9:27
Guava mealy-wing, report of. 1893. p. 314 .....	A9.7:5
Guaymas, Mexico. Plants collected by Edward Palmer in 1890 at, list of (Vasey and Rose). 1890. p. 87 .....	A6.5:1
Guenon system of selecting cattle, value of (Blight). 1883. p. 233 .....	A1.7:2
Guenther, Richard. Germany, horse and dog meat as food in. p. 520 .....	A4.1:900
Guernsey cattle, breed of (Harrison). 1869. p. 302* .....	A27.9:7
Guianas, agriculture in the. 1891. p. 682 .....	A27.9:29
Guinea pigs:	
Immunity from tuberculosis in, use of attenuated bacillus tuber- culosis in producing (De Schweinitz). p. 318 .....	A4.1:898
Immunity in, experiments on production of, with reference to hog cholera and swine plague bacteria (Smith and Moore). 1894. p. 41 .....	A4.3:6
Production of immunity in, from hog cholera by use of blood serum from immunified animals. p. 269 .....	A4.1:898
Gulf coasts, are present [storm] warnings and displays by flag and lantern best that can be devised for? (Smith). 1899. p. 27...	A29.3:24
Same (McAdie). 1899. p. 29 .....	A29.3:24
Gulf States:	
Fig culture in (Earle). 1897. p. 23 .....	A20.3:5
Forage plants and forage resources of (Tracy). 1898 .....	A3.3:15
Fruits, tropical and semitropical of (Reasoner). p. 7 .....	A20.3:1
Gulf stream. Drift of, near Key West, Fla., note on (Abbe). 1900. p. 210 .....	A29.6:28
Gulf stream myth, report of (Watts). 1900. p. 393 .....	A29.6:28
Gulley, F. A.:	
Agricultural experimentation, establishment of official methods of. 1893. p. 147 .....	A10.3:16
Animals, number of, to be used in feeding experiments. 1891. p. 94 .....	A10.3:7
Gum, production of, in fruit trees (Vasey). 1874. p. 227 .....	A27.9:12
Gum arabic. <i>See</i> Dextrine.	
Gun, James. Weather forecasting, long range, in Canada. 1899. p. 149 .....	A29.6:27
Gunning-Kjeldahl method and a modification applicable in pres- ence of nitrates (Voorhees). 1892. p. 85 .....	A7.3:35
Gurler, H. B. Swine breeding, experiments in. 1883. p. 155 .....	A1.7:2
Guthrie, Ossian. Water level, fluctuation of, in the Great Lakes. 1896. p. 420 .....	A29.6:23
Gypsum, solubility of, in aqueous solutions of sodium chloride (Cameron). 1901. p. 25 .....	A26.3:18
Same, of certain electrolytes (Cameron and Seidell). 1901. p. 46.	A26.3:18
Gypsy-moth. <i>See</i> Gipsy-moth.	
Habana, Cuba. <i>See</i> Havana.	

\*By a misprint, this page number appears twice.

Hacienda Perla, Puerto Rico, meteorological observations at (Hansard). 1898. p. 407.....	A29.6:26
Hackett, Arthur E:	
Climate and crop service weekly bulletins, should remarks of correspondents be published? 1899. p. 107.....	A29.3:24
Climate of Missouri, notes on. 1899. p. 582.....	A29.6:27
Hailstorm in Missouri, severe. 1898. p. 409.....	A29.6:26
Haden, J. J. Smut or bunt, information on. 1865. p. 5. No. 2..	A27.9:3
Hagemann, Oscar. Milch cows, metabolism of, investigations on. 1899. p. 803, 903.....	A10.6:10
Hagen, W. A. Hessian fly not imported from Europe. 1883. App. p. 43.....	A8.1:3
Hague, Arnold. Forest needs of Yellowstone National Park, letter relative to. 1888. p. 206.....	A13.3:2
Hail:	
Average frequency of days of, during 1893-1897 (De Riemer and Abbe). p. 546.....	A29.6:26
Damage by, in spite of cannonading (Pernter). 1901. p. 117...	A29.6:29
Destructive, frequency and extent of, note on (Abbe). 1900. p. 293.....	A29.6:28
Fall, depth of, notes on (Abbe). 1897. p. 399.....	A29.6:25
Frequency of, in U. S., notes on (Abbe). 1900. p. 396.....	A29.6:28
Popular queries about, with answers (Kimball). 1901. p. 422..	A29.6:29
Prevention of, by cannonading (Abbe). 1900. p. 251.....	A29.6:28
Remarkable, notes on (Abbe). 1894. p. 215.....	A29.6:22
Structure and formation of, notes on (Abbe). 1901. p. 73.....	A29.6:29
Hail and a rain gauge for its measurement (Abbe). 1898. p. 210..	A29.6:25
Hail and its methods of formation (Abbe). 1900. p. 156.....	A29.6:28
Hail and thunderstorms in Oregon, notes on (Abbe). 1901. p. 262..	A29.6:29
Hail clouds, bombarding, notes on (Abbe). 1900. p. 542.....	A29.6:28
Hail insurance, notes on (Abbe). 1901. p. 219.....	A29.6:29
Hail shooting, general report on, presented to 3d International Meteorological Congress, Lyons (Plumandon). 1902. p. 35...	A29.6:30
Same, notes on (Abbe). 1902. p. 35.....	A29.6:30
Hailstones:	
Lumps of ice as (Abbe). 1894. p. 293.....	A29.6:22
Structure of, note on (Abbe). 1897. p. 352.....	A29.6:25
Hailstorm:	
Bombardment of, notes on (Abbe). 1901. p. 176.....	A29.6:29
Cloud phenomena attending (Very). 1894. p. 292.....	A29.6:22
St. Lawrence River, notes on (Abbe). 1901. p. 506.....	A29.6:29
Severe—	
at St. Louis, Mo. 1902. p. 487.....	A29.6:30
in Missouri (Hackett). 1898. p. 409.....	A29.6:26
Haines, Warfleet. Leeds, England, cost of hauling farm products over wagon roads at. p. 2.....	A22.4:27
Hair balls. <i>See</i> Crimson clover hair balls.	
Hairy caterpillars, destruction of, by birds (Forbush). 1899. p. 85.	A9.6:20
Hairy vetch. <i>See</i> Vetch.	
Haiti, weather bureau service in, note on (Abbe). 1900. p. 249....	A29.6:28
Hale, Edwin M. Ilex cassine, aboriginal North American tea, its history, distribution, and use among native North American Indians. 1891.....	A6.3:14
Hale, J. H. Peach culture, notes on. p. 50.....	A20.1:894
Same, reprinted.....	A20.4:3
Hall, C. W. Technical education. 1894. p. 67.....	A10.3:20
Hall, D. M. <i>See</i> , for reports as Chief, 1894, Property and Stationery Division, Agriculture Department.	
Hall, Frank H.:	
Agriculture and agricultural science, some books on, published 1893-96.....	A10.4:31
<i>See also</i> as joint author, Jordan, Whitman Howard—True, Alfred Charles.	
Hall, Maxwell:	
Climatological data for Jamaica. 1901. pp. 214, 253, 304, 352, 467, 497, 595.....	A29.6:29
same. 1902. p. 69.....	A29.6:30

# Index

	Classification no.
Hall, Maxwell—Continued	
Jamaica weather bureau service. 1898. p. 303.....	A29.6:26
Sun-spot period and temperature and rainfall of Jamaica. 1901. p. 503.....	A29.6:29
West Indies, climate of. 1896. p. 589.....	A29.3:11 <sup>a</sup>
Hall, Ruth. House plants, cultivation of. p. 366.....	A1.1:863
Hall, William H. Catalpa, hardy, in commercial plantations. 1902.	A13.3:37
Hall, William L.:	
Forest extension in Middle West. 1900. p. 145.....	A1.10:900
Timber resources of Nebraska. 1901. p. 207.....	A1.10:901
Tree planting on rural school grounds. 1901.....	A1.9:134
Hall, W. W.:	
Farmers' families, health of. p. 453.....	A1.1:862
Farmers' houses, places and plans for. p. 313.....	A1.1:863
Halle, Germany, agricultural experiment station at:	
Apparatus and methods of analysis employed at. 1895. p. 457..	A10.6:5
Description of. 1895. p. 363.....	A10.6:5
Hallett, F. F. Seed, selection and planting of. 1874. p. 381.....	A27.9:12
Halos:	
Detroit, Mich., May, 1900 (Hooper). p. 202.....	A29.6:28
Hevelius, notes on (Kimball). 1901. p. 566.....	A29.6:29
Lunar (Finney). 1894. p. 76.....	A29.6:22
Observation of phenomena (Schipps). 1897. p. 294.....	A29.6:25
same (Abbe). 1897. p. 305.....	A29.6:25
Parhelic circles, and contact circles, notes on (Kimball). 1902. p. 317.....	A29.6:30
Solar, note on (Abbe). 1899. p. 59.....	A29.6:27
Halstead, Marshal. Eggs, poultry, and milk in Great Britain. p. 508.	A4.1:900
Halsted, Byron David:	
Cranberry scald and cranberry gall fungus, treatment of. 1891. p. 18.....	A28.5:6
Fruit decays, study of. 1893. p. 91.....	A10.3:16
Fungi, field observations with. 1894. p. 93.....	A10.3:20
Fungus diseases, relations of climate and rainfall to prevalence of. 1899. p. 126.....	A10.3:65
Peronosporæ, economic, for 1889 in New Jersey, some notes upon. 1889. p. 201.....	A28.5:5
Peronosporæ and rainfall, report on. 1889. p. 6.....	A28.5:5
Plants, varieties of, what our experiment stations have done in originating, by crossing, selecting, etc. 1901. p. 143.....	A10.3:99
Solandi [sun] printing. 1894. p. 93.....	A10.3:20
Sphærotheca, another, upon phytoptus distortions. 1889. p. 134.	A28.5:5
Sphærotheca phytoptophila, notes upon. 1889. p. 85.....	A28.5:5
Uromyces, an interesting. 1889. p. 11.....	A28.5:5
<i>See also</i> , as joint author, Ellis, J. B.	
Halsted, Byron David, and Fairchild, David Grandison. Sweet- potato black rot, report on. 1891. p. 1.....	A28.5:7
Hamburg, Germany:	
Agricultural exhibition at, 1863 (Needham). p. 19.....	A1.1:863
American dried apples in, 1894 (Robertson). p. 12.....	A7.3:48
Butter and cheese markets in (Ashby). p. 223.....	A4.1:899
Egg trade in (Ashby). p. 345.....	A4.1:899
Market for American products in. 1897.....	A12.4:14
Hamburg International Exhibition (live stock), 1883:	
Advance notice on. No. 53. p. 28.....	A27.9:20
Report of (Sanders). p. 371.....	A4.1:884
same (Huidekoper). p. 386.....	A4.1:884
same (Sanders). 1884. p. 181.....	A4.2:An5
same (Huidekoper). 1884. p. 199.....	A4.2:An5
Hamburg International Horticultural Exhibition, proposed, Sept., 1869, note on. p. 63.....	A27.9:7
Hamilton, John:	
Agricultural education, address on. 1896. p. 48.....	A10.3:41
Entomological Commission, U. S., fifth report of, comments on. 1891. p. 129.....	A9.7:4
Farmers' institute as factor in creating desire for agricultural education. 1902. p. 68.....	A10.3:120

	<b>Index</b>
	<b>Classification no.</b>
Hamilton, John—Continued	
Pennsylvania's road system. 1901. p. 25.....	A22.3:21
Hamilton County, N. Y. See Hosmer, Ralph S., and Bruce, Eugene S.	
Hamlin, George H. Address of, before convention of National League for Good Roads, Washington, 1893. p. 47.....	A10.3:14
Hammon, William H.:	
Frost, injury from, and methods of protection. 1896.....	A29.2:F92
same, revised. 1899 .....	A29.3:23
Kites, experiments with, at San Francisco, Cal. 1896. p. 288...	A29.6:24
Tamalpais, Mount, meteorological station, report on operation of, for September, 1897. p. 397.....	A29.6:25
Weather Bureau instruments, report on location and elevation of, at Mount Tamalpais, Cal. 1897. p. 494 .....	A29.6:25
Weather service on Pacific coast, possibilities of; value of Mount Tamalpais observations. 1899. p. 56.....	A29.3:24
Hammon, William H., short biography of (Abbe). 1899. p. 102 ..	A29.6:27
Hammon, William H., and Duenckel, F. W. Temperatures, minimum, abstract of comparison of, recorded at U. S. Weather Bureau and Forest Park meteorological observatories, St. Louis, Mo., 1891. p. 12.....	A29.6:30
Hammond, Harry:	
Cotton—	
culture of. 1896. p. 225.....	A10.3:33
handling and uses of. 1896. p. 351 .....	A10.3:33
Hampton Beach, N. H., tornado at, July 4, 1898 (Sweetland). p. 308 .....	A29.6:26
Hams:	
American, in Germany (Barnes). p. 519 .....	A4.1:898
Insects affecting (Howard). 1896. p. 100 .....	A9.6:4
Handy, Robert Breckenridge:	
Asparagus culture. 1897 .....	A1.9:61
Cotton, history and general statistics of. 1896. p. 17.....	A10.3:33
Peanuts, culture and uses. 1895.....	A1.9:25
Handy, Robert Breckenridge, and Cannon, Minna A. Agriculture Department publications, from 1840 to June, 1901, list by titles. 1902 .....	A21.3:6
Hanford area, California, soil survey of (Lapham and Heileman). p. 447 .....	A26.5:901 <sup>1</sup>
Hann, Julius:	
Atmosphere, upper, study of, from observations on mountain stations. 1896. p. 754.....	A29.3:11 <sup>3</sup>
Austria-Hungary, climate of, references to sources of information relative to. 1896. p. 657.....	A29.3:11 <sup>3</sup>
Meteorological stations and publication of results of observations. 1894. p. 1 .....	A29.3:11 <sup>1</sup>
Meteorology, text-book of, note on (Abbe). 1901. p. 74 .....	A29.6:29
same (Bigelow). 1902. p. 298.....	A29.6:30
Rainfall, increase of, with altitude above sea level. 1902. pp. 218, 227 .....	A29.6:30
Hann's handbook of climatology, note on (Harrington). 1898. p. 353 .....	A29.6:26
Hanna, Marcus Alonzo. Southern development. 1902. p. 53.....	A22.3:25
Hanover, Germany. Cost of hauling farm products over wagon roads at (Crane). p. 6.....	A22.4:27
Hanrick, E. G. Rainfall in Texas, 1881-93. p. 174.....	A29.6:22
Hansard, Arthur C. Meteorological observations at Hacienda Perla, Puerto Rico. 1898. p. 407 .....	A29.6:26
Hansen, N. E. Fruits, breeding of, notes on. 1893. p. 92.....	A10.3:16
Harbaugh, W. H.:	
Cattle—	
heart and blood vessels of, diseases of. p. 77 .....	A4.2:C29 <sup>2</sup>
nervous system of, diseases of. p. 111 .....	A4.2:C29 <sup>2</sup>
Horse, respiratory organs of, diseases of. p. 87 .....	A4.2:H78
"Staggers," disease known as, among horses in Virginia and North Carolina. p. 209 .....	A4.1:886
Hardin, M. B. Cotton-seed meal, metaphosphoric and pyrophosphoric acids in, occurrence of. 1892. p. 50.....	A7.3:35



# Index

	Classification no.
Harding, Charles. Great Britain, climate of British Islands. 1896. p. 611.....	A29.3:11 <sup>3</sup>
Hardinge, R. M. New Mexico, water supply of, for season of 1900, as depending on snowfall. p. 496.....	A29.6:28
Hardwoods, southern, working plan for, and its results (Foley). 1901. p. 471.....	A1.10:901
Hardy catalpa. <i>See</i> Catalpa.	
Harford County, Maryland. Soil survey of (Smith and Martin). p. 211.....	A26.5:901 <sup>1</sup>
Hargitt, C. W. Cankerworm, notes upon. 1890. p. 8.....	A9.7:3
Harkness, William. Stars, shooting, hints to observers of. 1899. p. 9.....	A29.6:27
Harlequin cabbage bug, or calico back, circular relative to (Howard). 1895.....	A9.5:10
Harlow, G. A. Experiment Stations Office and agricultural experiment stations, list of publications of, 1888-99. 1900. p. 508..	A10.3:80
Harmon, John H., short biography of (Williams). 1899. p. 107...	A29.6:27
Harnden, Enos S. <i>See</i> , for reports as special agent on purchase and distribution of seeds, 1894-97.....	A24.5:
Harpiphorus maculatus, report on (Harrington). 1890. p. 227....	A9.7:2
Harpoot, Turkey in Asia, climate of, 1898-1900 (Huntington). p. 250.....	A29.6:29
Harrington, Mark Walrod:	
Climate and meteorology of Death Valley, Cal., notes on. 1892..	A29.3:1
Climate of Puerto Rico. 1898. p. 437.....	A29.6:26
Forest meteorological observations, review of, a study preliminary to discussion of relation of forests to climate. 1893. p. 23....	A13.3:7
Fruits, vegetables, and other food products, protection of, from injury by heat or cold during transportation. 1894.....	A29.2:F94
Great Lakes, currents of, as deduced from movements of bottle papers, during seasons of 1892 and 1893.....	A29.5:B
Hann's handbook of climatology, note on. 1898. p. 353.....	A29.6:26
Meteorological work of agricultural experiment stations and agricultural colleges, and their relations to Weather Bureau. 1892. p. 42.....	A10.3:7
Meteorological work of agricultural institutions. 1892.....	A10.3:10
Meteorology, what it is doing for the farmer. p. 117.....	A1.10:894
Rainfall and charts of rainfall. 1902. p. 236.....	A29.6:30
Rainfall and snow of U. S., compiled to end of 1891, etc.....	A29.5:C
Weather map, history of. 1895. p. 327.....	A29.3:11 <sup>2</sup>
<i>See also</i> , for reports as Chief, Weather Bureau, Agriculture Department, 1891-1894.....	A29.1:
Harrington, W. Hague. Harpiphorus maculatus, report on. 1890. p. 227.....	A9.7:2
Harris, Abram Winegardner:	
Address of, as president of Association of American Agricultural Colleges and Experiment Stations, at 15th annual convention. 1901. p. 41.....	A10.3:115
Agricultural experiment stations—	
at World's Columbian Exposition, report on. 1891. p. 43...	A10.5:3
collective exhibit of, at Paris Exposition, 1900, committee report on preparation and care of. 1898. p. 43.....	A10.3:49
cooperation with U. S. Weather Bureau, report of committee on. 1893. p. 106.....	A10.3:16
publications of, uniformity of, report on. 1894. p. 30.....	A10.3:20
Churches, relation of, to State colleges and universities. 1899. p. 100.....	A10.3:65
Horticulturists of agricultural experiment stations, report of meeting at Columbus, Ohio, June 13, 14, 1889.....	A10.3:3
<i>See also</i> , for reports as Director, Experiment Stations Office, Agriculture Department, 1891 and 1892.....	A10.1:
<i>See also</i> , as editor of proceedings, Agricultural Colleges and Experiment Stations, American, Association of.	
Harris, Joseph. Stall-feeding cattle and sheep. p. 317.....	A1.1:862
Harris, Rollin Arthur:	
Ocean tides, principal, partial explanation of some of. 1900. p. 103.	A29.6:28
Oscillation period of Lake Erie, note on. 1902. p. 312.....	A29.6:30



	<b>Index</b>
	<b>Classification no.</b>
Harris, William Torrey. Agriculture, teaching of. 1895. p. 43 . . . .	A10.3:24
Harrison, Edmund G.: Macadam roads, repairs of. 1898 . . . . .	A22.4:30
Stone roads in New Jersey. 1895. p. 23 . . . . .	A22.3:17
Harrison, Thomas L. Guernsey cattle, breed of. 1869. p. 302* . . .	A27.9:7
Hart, C. A. Wireworms, life history of. 1891. p. 246 . . . . .	A9.7:3
Hartford, Conn., Connecticut shade-grown tobacco to be sold at auction at, May 1, 1902, catalogue of. 1902 . . . . .	A26.2:T55
Hartig, Dr. White fir, disease of. 1889. p. 164 . . . . .	A28.5:5
Hartley, Charles P. Pollination, premature, injurious effects of, with general notes on artificial pollination and setting of fruit without pollination. 1902 . . . . .	A19.3:22
Hartwell, Burt L. Pot experiment to test field observations concern- ing soil deficiencies. 1901. p. 73 . . . . .	A7.3:62
<i>See also</i> , as joint author, Wheeler, Homer Jay.	
Harvard and Yale boat crews, dietary studies of (Atwater and Bryant). 1900 . . . . .	A10.3:75
Harvard University, meteorological stations of, note on (Abbe): 1897. p. 540 . . . . .	A29.6:25
1901. p. 69 . . . . .	A29.6:29
Harvesting machinery, trials of. 1870. p. 227 . . . . .	A27.9:8
Harwi, H. J. Live-stock industry, condition of, of Nebraska. p. 382 . . . . .	A4.1:889-90
Harwood, P. M. Agriculture, what shall the professor of, teach? 1893. p. 159 . . . . .	A10.3:16
Harz, C. O. Spores of Hymenomycetes, method for preserving. 1889. p. 163 . . . . .	A28.5:5
Hassall, Albert: Chicken tick, note on. p. 493 . . . . .	A4.1:899
Chickens, animal parasites of, checklist of. 1896 . . . . .	A4.4:9
Ducks, animal parasites of, checklist of. 1896 . . . . .	A4.4:13
Flukes and tapeworms of cattle, sheep, and swine, bibliography of. 1898. p. 145 . . . . .	A4.3:19
Geese, animal parasites of, checklist of. 1896 . . . . .	A4.4:14
Parasites of cattle, sheep, and swine, compendium of, arranged according to their hosts. 1898. p. 137 . . . . .	A4.3:19
Pigeons, animal parasites of, checklist of. 1896 . . . . .	A4.4:15
Surra and allied trypanosomatic diseases, bibliography of. p. 161. same, p. 131 . . . . .	A4.1:901
Tapeworms of poultry, bibliography of. 1896. p. 81 . . . . .	A4.3:12
Trichinosis in Germany, bibliography of. 1901. p. 193 . . . . .	A4.3:30
Turkeys, animal parasites of, checklist of. 1896 . . . . .	A4.4:12
<i>See also</i> , as joint author, Stiles, Charles Wardell.	
Hassé, Adelaide Rosalia. List of publications of Agriculture De- partment, from 1841 to June 30, 1895 . . . . .	A17.3:9
Hateful grasshopper. <i>See</i> Grasshopper.	
Hauk, James W. <i>See</i> , as joint author, McLean, L.	
Hauling. <i>See</i> Farm products.	
Haupt, C. M. Highways of commerce. 1901. p. 56 . . . . .	A22.3:21
Haupt, Lewis Muhlenberg. Railroads, relation of common roads to. 1902. p. 61 . . . . .	A22.3:22
Hauser, I. L. Wheat culture in India. p. 569 . . . . .	A1.1:885
Hautreux, A. North Atlantic currents and surface temperatures. 1894. p. 192 . . . . .	A29.3:11 <sup>1</sup>
Havana, Cuba: Climatology of, monthly notes on— 1898 (Delmonite). p. 152 . . . . .	A29.6:28
Apr.-July, Sept.-Oct., 1901 (Stockman) . . . . .	A29.6:29
Nov. 1901 (Hayes) . . . . .	A29.6:29
Dec., 1901, Feb.-Apr., 1902 (Stockman) . . . . .	A29.6:
Imports of 1865-74. p. 51 . . . . .	A27.9:13
Meteorological observations at, notes on (Abbe). 1898. pp. 60, 104 .	A29.6:26
Havens, Felix G. Insect control in Riverside, California. 1900. p. 83 .	A9.6:22
Havre, France, cost of hauling farm products over wagon roads at (Chancellor). p. 3 . . . . .	A22.4:27

\* By a misprint this page number appears twice.

# Index

	Classification no.
<b>Havre, Montana:</b>	
Chinook at, notes on (Abbe). 1898. p. 568 .....	A29.6:26
Leonids at (Ling). 1901. p. 509 .....	A29.6:29
Weather type at (Ling). 1898. p. 411 .....	A29.6:26
<b>Hawaii:</b>	
Agricultural investigations in (Evans). 1901. p. 503.....	A1.10:901
Agricultural resources and capabilities of (Stubbs). 1901.....	A10.3:95
Agriculture in, etc. (Maxwell). 1898. p. 563.....	A1.10:898
Central American coffee disease, danger of introducing into (Swingle). 1898 .....	A28.4:16
Chickens and their diseases in (Sedgwick). 1901.....	A10.9:1
Climatological data, monthly, May, 1901-Oct., 1902 (Lyons) .....	A29.6:
Commerce of, 1887 to 1897.....	A12.4:18
Farmers' institute work accomplished in (True). 1902. p. 33...	A10.3:120
Irrigation in, report on (Maxwell). 1900.....	A10.3:90
Meteorology in (Kimball). 1902. p. 364 .....	A29.6:30
Rain in, notes on (Abbe). 1898. p. 116 .....	A29.6:26
Reptiles in, order preventing importation. 1902.....	A5.4:36
Soils of, estimation of lime, potash, and phosphoric acid in (Maxwell). 1898. p. 63.....	A7.3:56
Standard of time, notes on (Abbe). 1900. p. 207 .....	A29.6:28
Sugar of, importation of, possible influence on beet-sugar pro- duction in U. S. 1898 .....	A1.4:7
Volcanic eruptions in, report on (Lyons)—	
1897. p. 144 .....	A29.6:27
1899. p. 298 .....	A29.6:27
Weather of, for Feb., 1901, notes on (Abbe). p. 174 .....	A29.6:29
<i>See also</i> Honolulu.	
<b>Hawaii Agricultural Experiment Station:</b>	
Annual report, for 1901 (Smith). 1902. p. 361.....	A10.1 <sup>2</sup> :901
Bulletins of .....	A10.9:
<b>Hawes, John B.</b> Flax culture in Austro-Hungary. 1892. p. 55 ...	A11.5:4
<b>Hawkins, Barry C.:</b>	
Appalachians, southern, area of, heavy rainfall in. 1897. p. 442.	A29.6:25
Blue Ridge, southern, and Piedmont region, northwest gales of. 1899. p. 13 .....	A29.6:27
Rainfall, heavy, region of. 1895. p. 294 .....	A29.6:23
Seismic noises in North Carolina and Georgia. 1897. p. 393....	A29.6:25
<b>Hawks, A. McL.</b> Fog, utilization of, report on. 1899. p. 101 .....	A29.6:27
<b>Hawks, Emma Beatrice.</b> Poultry, bibliography of. 1897.....	A17.3:18
<b>Hawks and owls:</b>	
Erroneous ideas concerning—	
1895. p. 590 .....	A1.10:895
1896. p. 628 .....	A1.10:896
Food of. p. 402 .....	A1.1:887
same, p. 402 .....	A5.1:887
Related to the farmer (Fisher). 1894. p. 215 .....	A1.10:894
Relation to agriculture in U. S. (Fisher). 1893.....	A5.3:3
<b>Hawthorn fungi,</b> microscopic investigation of (Taylor). 1873. p. 431.	A27.9:11
<b>Hay, Robert:</b>	
Artesian and underflow investigation between 97th meridian of longitude and foothills of Rocky Mountains, final geological reports on. 1893. Pt. 3 .....	A15.2:Ir7 <sup>2</sup>
Artesian and underflow investigation, progress report. 1891. p. 137 .....	A15.2:P94 <sup>1</sup>
Artesian wells, investigation, geologist's report. 1890. p. 37....	A15.2:Ar7
<b>Hay:</b>	
Amount and value of, reckoning of. 1898. p. 669 .....	A1.10:898
Bermuda grass for (Ransom). p. 87 .....	A1.1:883
same. No. 61. p. 27 .....	A27.9:21
Crop statistics, annual .....	A27.1:
Great Britain. 1894. p. 145.....	A27.9:33
New York market 1867-70. p. 23 .....	A27.9:9
Salt and fresh water marsh, report on (Allen). p. 296.....	A1.1:876
Salt-marsh, abundant growth and feeding value of. 1898. p. 16.	A1.9:84
Spontaneous combustion of (Langworthy). 1899. p. 26 .....	A1.9:105
<i>See also</i> Alfalfa hay — Crops, principal — Marsh hay.	

	Index
	Classification no.
Hay-making. 1864. No. 4. p. 6.....	A27.9:3
Hay-worm. <i>See</i> Clover hay-worm.	
Hayes, John L. Sheep husbandry in South. 1879. p. 63.....	A1.2:Sh3
Hayes, Montrose W.: Climatology of Havana, Cuba, note on, Nov. 1901. p. 491 .....	A29.6:29
Industries of Cuba and other islands of West Indies, value of climate and crop and storm warning services of Weather Bureau to. 1902. p. 58.....	A29.3:31
Hayes, S. H. T. Fertilizers, mixed, organic nitrogen in, availability of. 1895. p. 112.....	A7.3:47
Hays, M. A. Roads, good, relation of, to industrial development. 1902. p. 78.....	A22.3:23
Hays, Willet M.: Agricultural colleges, preparatory work in. 1898. p. 65.....	A10.3:49
Agricultural education, advances in. 1893. p. 132.....	A10.3:16
Agriculture, methods of instruction in teaching. 1896. p. 37...	A10.3:30
Grass gardens, methods and purposes. 1893. p. 130.....	A10.3:16
Plant and animal breeding, progress in. 1901. p. 217.....	A1.10:901
Plant breeding. 1901.....	A28.3:29
Plant experimenting, methods of. 1896. p. 84.....	A10.3:30
Hayti. <i>See</i> Port au Prince.	
Haywood, J. K.: Arsenical insecticides, report on. 1902. p. 96.....	A7.3:67
Insecticides and fungicides— chemical composition and effectiveness of certain preparations. 1901.....	A1.9:146
same. 1902.....	A7.3:68
methods for chemical analysis of. 1902.....	A7.4:10
Soluble arsenic in arsenical insecticides. 1902. p. 51.....	A9.6:37
Hazard, Willis P. Channel Islands, the people and their cattle. 1882. p. 77.....	A1.8:22
Hazen, A. J. Meteor, bright, report on. 1897. p. 484.....	A29.6:25
Hazen, Henry Allen: Atmospheric pressure— high and low, monthly report on, June, Nov., 1895–Nov., 1899.	A29.6:
low, effect of, in determining weather conditions in upper Mississippi Valley. 1896. p. 89.....	A29.6:23
Balloon ascension, report of. p. 517.....	A29.1:891 <sup>s</sup>
Barometer readings, reduction of, to sea level. 1894. p. 538....	A29.6:22
Barometric troughs of plateau region, report on. 1895. p. 207..	A29.6:23
Chicago, climate of. 1893.....	A29.3:10
Climate of United States. 1896. p. 585.....	A29.3:11 <sup>s</sup>
Cold spell of Nov., 1896, in Montana and adjoining States. p. 414.	A29.6:24
Forests and rainfall, report on. 1897. p. 395.....	A29.6:25
Heated term from July 28 to August 17, 1896. p. 289.....	A29.6:24
Hygrometric observations, utility of. 1899. p. 164.....	A29.3:24
Meteorologic waves, report on. 1899. p. 323.....	A29.1:898
Moisture in United States, distribution of. 1899. p. 327.....	A29.1:898
Moon and aurora, report on. 1898. p. 108.....	A29.6:26
Rainfall, extraordinary, in Texas. 1899. p. 249.....	A29.6:27
Signals, Weather Bureau. 1892. p. 39.....	A29.3:7
Storms— local, in United States during 1890, 1891 and 1892. p. 505....	A29.1:891 <sup>s</sup>
Texas, study of. 1895. p. 54.....	A29.6:23
violent, in United States for 1894. p. 283.....	A29.1:894
violent, of March 23, 1893. p. 90.....	A29.6:21
violent local, of Sept. 21, 1894. p. 369.....	A29.6:22
Temperatures of Nov. and Dec., 1896. p. 458.....	A29.6:24
Washington, Mount, fluctuations of temperature and pressure at base and summit of, 1871–86. pp. 171, 199, 224, 250.....	A29.6:19
Weather Bureau instrument shelter. 1893. p. 29.....	A29.3:7
Weather forecasts, long-range; can they be made with sufficient precision to be of general utility? 1899. p. 43.....	A29.3:24
West Indian storms, relative intensity of. 1894. p. 333.....	A29.6:21
Wind-rush at Washington, D. C., Sept. 29, 1896. p. 322.....	A29.6:24
Hazen, Henry Allen, short biography of (Abbe). 1900. p. 14.....	A29.6:28

# Index

	Classification no.
Hazen, J. S.:	
Cold waves in Southwest. 1899. p. 291.....	A29.6:27
Drought of 1899 in southwest Missouri. p. 151.....	A29.6:28
Storms, local, at Springfield, Mo., 1900. p. 201.....	A29.6:28
Health:	
Climate and .....	A29.8:
Farmers' families (Hall). p. 453.....	A1.1:862
How insects affect, in rural districts (Howard). 1902.....	A1.9:155
Peoples'—	
1894. p. 201 .....	A27.9:32
1895. p. 140 .....	A27.9:33
1896. p. 6. No. 136 .....	A27.9:34
Public—	
and meteorology, relation between (Phillips). 1895. p. 171..	A29.6:23
relations of bovine tuberculosis to (Salmon). 1901.....	A4.3:33
State board of, experiment station veterinarian as member of	
(Reynolds). 1898. p. 14.....	A4.3:22
Heaps, I. G. Road situation in Iowa. 1901. p. 64 .....	A22.3:21
Hearn, W. Edward. <i>See</i> , as joint author, Coffey, George N.	
Heart, diseases of:	
Cattle (Harbaugh). p. 77.....	A4.2:C29 <sup>2</sup>
Horses (Trumbower). p. 219 .....	A4.2:H78
Heat:	
Drought, and insect life (Murtfeldt). 1902. p. 97.....	A9.6:31
Our killing, report on (Abbot). 1901. p. 371.....	A29.6:29
Radiant—	
for prevention of frost, notes on (Abbe). 1899. p. 156 .....	A29.6:27
measurement of, note on (Abbe). 1900. p. 108 .....	A29.6:28
<i>See also</i> Warm waves.	
Heat equivalent of nutrients of food (Stohmann). 1896. p. 590.....	A10.6:6
Heat radiation of stars. note on (Abbe). 1899. p. 472.....	A29.6:27
Heated term from July 28 to Aug. 17, 1896 (Hazen). p. 289.....	A29.6:24
Heath, H. A.:	
Kansas, animal industry of. condition of. p. 405.....	A4.1:889-90
Sheep industry, condition of, west of Mississippi River. p. 247..	A4.1:889-90
Heath, H. A., and Minto, John. Sheep industry west of Mississippi	
River. 1892. (Chapters 1-4, by Heath; chapter 5, by Minto.)	
p. 701 .....	A4.2:Sh4 <sup>1</sup>
Heath, Russell. English walnuts, culture of. 1892. p. 133.....	A1.8:20
Heating value of corn, calorimetric determination of (Richards).	
1898. p. 95.....	A10.3:49
Hébert, A. Farm manure, report on. 1895. p. 141.....	A10.6:5
Hedges. <i>See</i> Osage hedges—Osage orange.	
Hedrick, Ellen A. Irrigation and land drainage, list of references	
to publications relating to. 1902.....	A17.3:41
Heffron, D. S. Poultry. p. 358.....	A1.1:862
Hehner method. <i>See</i> Van Slyke, Lucius Lincoln.	
Heifer beef. <i>See</i> Beef.	
Heiges, Samuel B. <i>See</i> , for reports as Pomologist, Pomology Divi-	
sion, Agriculture Department, 1894-1896 .....	A20.1:
Heileman, W. H. <i>See</i> , as joint author, Lapham, Macy H.	
Heileman, W. H., and Mesmer, Louis. Soil survey of Lake Charles	
area, Louisiana p. 621 .....	A26.5:901 <sup>1</sup>
Helena, Mont. Fungi of, notes on (Kelsey). 1889. p. 80.....	A28.5:5
Heliothis armigera. <i>See</i> Bollworm.	
Hellmann, G.:	
Meteorology and terrestrial magnetism in 15th, 16th, and 17th	
centuries, contribution to bibliography of. 1895. p. 352.....	A29.3:11 <sup>1</sup>
Rainfall and charts of rainfall. 1902. p. 236.....	A29.6:30
Hellriegel, H. Bernberg Agricultural Experiment Station, sand cul-	
ture at, methods of. 1895. pp. 749, 835 .....	A10.6:5
Hemenway, H. D. Hydrocyanic-acid gas, experiments with, as	
means of exterminating mealy bugs and other insect pests in	
greenhouses. 1900. p. 69.....	A9.6:22
Hemiptera. <i>See</i> Heteroptera.	
Hemipterous insects, record of some experiments relating to effect of	
puncture of some, upon shrubs, fruit, and grains, 1886 (Web-	
ster). 1887. p. 54 .....	A9.3:13

	<b>Index</b>
	(classification no.)
"Hemlock reds," report on experiments with (Hurty). 1894. p. 206.....	A7.3:43
Hemp:	
Crop of. 1885. p. 75.....	A27.9:24
Culture of—	
1863 (Bradford). p. 91 .....	A1.1:863
1895 (Dodge). p. 215.....	A1.10:895
1896 (Dodge) .....	A11.5:8
Europe, culture of (Dodge). 1898 .....	A11.5:11
Flax and, in Russia. 1869. p. 237 .....	A27.9:7
Growth of, in Italy, special consular report on (Gardini). 1897. p. 15.....	A11.5:11
<i>See also</i> Fibers—Flax—Manila hemp plantain—Sisal hemp.	
Hemp industry in France (Dodge). 1892. p. 27.....	A27.8:1
Same, 2d edition. p. 27.....	A11.5:1
Hemp industry in U. S. (Dodge). 1892. p. 64.....	A27.8:1
Same, 2d edition. p. 64.....	A11.5:1
Same. 1901 (Dewey). p. 541.....	A1.10:901
Hemphill, J. C. Climate, soil, and agricultural capabilities of South Carolina and Georgia. 1882.....	A1.6:47
Hen flea ( <i>Sarcopsylla gallinacea</i> ), occurrence of, in Florida (Pack- ard). 1894. p. 23 .....	A9.7:7
Henderson, L. F. Plants, two new species of, from northwestern United States. 1899. p. 201 .....	A6.5:5
Henderson, Peter:	
Alfalfa, cultivation of. p. 566 .....	A1.1:884
Market gardening in vicinity of New York. p. 243.....	A1.1:865
Seed, maturing, localities best suited for. p. 572.....	A1.1:878
Hennepin County, Minn., gravel roads in, method of construction and cost of (Cooley). 1901. p. 96.....	A22.3:21
Henry, Alfred Judson:	
Address as chairman, section of records and reports, before second convention of Weather Bureau officials held at Milwaukee, Wis., Aug. 27, 29, 1901. p. 168 .....	A29.3:31
Alaska, climate of—	
1897. p. 248 .....	A29.6:25
1899. p. 50 .....	A10.3:62
American Forestry Association, summer meeting of. 1902. p. 401.....	A29.6:30
Appalachians, southern, climate of. p. 143.....	A1.2:Ap4 <sup>a</sup>
Atmospheric disturbances, local. 1898. p. 539.....	A29.6:26
Climate, statistics of, 1896, report of. p. 277.....	A29.1:897
Climatic conditions, general—	
1898. p. 595 .....	A29.6:26
1899. p. 579 .....	A29.6:27
1900. p. 587 .....	A29.6:28
1901. p. 592 .....	A29.6:29
Climatology, monthly notes on, Oct.—Dec., 1897 .....	A29.6:25
Cloud photography, report of. 1895. p. 169.....	A29.6:23
Clouds, wave or billow, report on. 1899. p. 57.....	A29.6:27
Cold Friday, date of. p. 545 .....	A29.6:27
Date palm, climatic data bearing upon culture of. 1898. p. 160.	A29.6:26
Flint, Earl, short biography of. 1901. p. 67 .....	A29.6:29
Humidity, relative, inside and outside of buildings. 1896. p. 456.	A29.6:24
Lake levels, variations of, and atmospheric precipitation. 1899..	A29.2:L15
Lake levels and wind phenomena. 1900. p. 203.....	A29.6:28
Lightning—	
loss of life and property by, 1890–98. p. 45 .....	A29.3:26
loss of life by, in U. S. 1899. p. 100 .....	A29.6:28
same. 1900 .....	A29.3:30
loss of property by, in U. S. 1899. p. 431.....	A29.6:28
Meteorological observations at Eagle, Alaska. 1900. p. 390 .....	A29.6:28
Meteorological tables, monthly, June, 1895–Apr., 1902.....	A29.6:
Meteorological work in Alaska. 1898. p. 154.....	A29.6:26
New England, southern, and other localities, relative humidity of, etc. 1896 .....	A29.3:19
Photographing lightning by daylight, report on. 1895. p. 379..	A29.6:23

# Index

	Classification no.
Henry, Alfred Judson—Continued	
Precipitation—	
average annual, in U. S., 1871–1901. p. 207.....	A29.6:30
excessive, in U. S. 1897. p. 13.....	A29.6:25
normal, in region of Great Lakes. 1899. p. 151.....	A29.6:27
Rain gage readings, comparative, at Atlanta, Ga. 1899. p. 543..	A29.6:27
Rain gages, remarks on. 1901. p. 500.....	A29.6:29
Rainfall—	
crop season. 1897. p. 607.....	A1.10:897
Masaya and Granada, Nicaragua. 1898. pp. 162, 305.....	A29.6:26
Nicaragua, 1876–93. p. 305.....	A29.6:26
United States. 1897. p. 317.....	A29.1:897
same, with annual, seasonal, and other charts.....	A29.5:D
Rainfall and charts of rainfall. 1902. p. 241.....	A29.6:30
St. Lawrence Island, climate of, 1894–99. p. 457.....	A29.6:27
Storms, local, monthly report on, July, 1895–Sept., 1897.....	A29.6:
Sunshine and snowfall, normal annual. 1898. p. 108.....	A29.6:26
Sunshine at southern California agricultural experiment farm, near Pomona, Cal. 1896. p. 237.....	A29.6:24
Temperatures, normal, by decades, for 8 a. m. and 8 p. m., 75th meridian time. 1902. p. 600.....	A29.6:29
Thermometer readings, comparative, at New York, N. Y. 1900. p. 99.....	A29.6:28
Thermometers, maximum and minimum, should not temperature forecasts be verified by readings of? 1902. p. 134.....	A29.3:31
Thunderstorm of Sept. 17–18, 1895, report on. p. 535.....	A29.6:26
Thunderstorms, progressive movement of. 1896. p. 331.....	A29.6:24
Thunderstorms on Aug. 2, 1899, report on. p. 359.....	A29.6:27
Tornado photographs, spurious, report on. 1899. p. 203.....	A29.6:27
Tornadoes, 1889–1896, report of. 1896. p. xxiii.....	A29.1:896
Tornadoes of April and May, 1896. p. 82.....	A29.6:24
Waves, lake-level pressure, sudden oscillations in, 1899. p. 305..	A29.6:27
Weather Bureau office, removal of, in New York City. 1898. p. 455.....	A29.6:26
Weather forecasts, amplification of. 1900. p. 107.....	A1.10:900
Weather, hot, of August, 1900. p. 333.....	A29.6:28
Weather observers in U. S., early individual. 1895. p. 291.....	A29.3:11 <sup>2</sup>
Weather of the month, Jan. 1898–Apr., 1902.....	A29.6:
Weather of 1897, report of. 1899. p. 261.....	A29.1:898
West India hurricane of Sept., 1896, notes concerning. p. 368...	A29.6:24
Wind velocity and fluctuations of water level on Lake Erie. 1902.	A29.5:J
Winters. Are our winters changing? 1898. p. 540.....	A29.6:26
Henry, W. A.:	
Address of, as president of Association of American Agricultural Colleges and Experiment Stations, at 7th annual convention. 1893. p. 38.....	A10.3:20
Animals, physical conditions surrounding, in experimental feed- ing, especially as relative to stalls and mangers. 1891. p. 92.	A10.3:7
Cattle, feeding and management of. p. 439.....	A4.2:C29 <sup>2</sup>
Entomology division, Agriculture Department, Pacific coast work of. 1889. p. 141.....	A9.7:2
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Hens, laying, number of, that may be profitably kept in one pen (Langworthy). 1900. p. 18.....	A1.9:114
<i>See also</i> Chickens — Poultry.	
Hens' eggs, food value of. 1899. p. 24.....	A1.9:87
<i>See also</i> Eggs.	
Henshaw, Samuel:	
Economic entomology, American, bibliography of more important contributions to—	
Pt. 1 (Walsh). 1889. p. 1.....	A9.2:B47 <sup>1-3</sup>
Pt. 2 (Walsh and Riley). 1889. p. 51.....	A9.2:B47 <sup>1-3</sup>
Pt. 3 (Riley). 1889. p. 97.....	A9.2:B47 <sup>1-3</sup>
Pt. 4. Government and State entomologists, etc., A–K. 1895.	A9.2:B47 <sup>4</sup>
Pt. 5. Same, L–Z. 1896.....	A9.2:B47 <sup>5</sup>
Entomological writings of Alpheus Spring Packard. 1887.....	A9.3:16
Gypsy moth in Massachusetts in 1891, report on. p. 75.....	A9.3:26



	Index Classification no.
Hepatic coccidia of rabbits. <i>See</i> <i>Eimeria stiedæ</i> .	
Hepialus argenteomaculatus, report on (Kellicott). 1889. p. 250...	A9.7:1
Hepworth, M. W. Campbell. Aurora australis of April 20, 1897, report on. p. 204.....	A29.6:25
Herbarium, U. S. National, contributions from .....	A6.5:
Herbarium for North America, north of Mexico, desiderata of, ranunculaceæ to rosaceæ, inclusive. 1887 .....	A6.3:4
<i>See also</i> Garden herbarium — Muhlenberg, H. — Vegetable Pathology Division.	
Herbarium pest, new, notes on (Riley). 1891. p. 108.....	A9.7:4
Same, further notes on (Riley). 1892. p. 40 .....	A9.7:5
Herbarium specimens, insects which attack, fumigation with bisulphid of carbon for complete and rapid destruction of (Du Bysson). 1893. p. 159 .....	A9.7:6
Herbertson, A. J.:	
Rainfall, distribution of, over land. 1901. p. 67.....	A29.6:29
Rainfall and charts of rainfall. 1902. p. 243.....	A29.6:30
Heredia, —, and Hermanos, —. Sorghum growing in Spain. 1893. p. 34.....	A7.3:40
Hermann, Binger. Pioneer road building, historical paper on. 1902. p. 48 .....	A22.3:25
Hermanos, —. <i>See</i> , as joint author, Heredia, —.	
Herrmann, Charles F. von:	
Climate, studies of, with reference to crops of the several sections. 1902. p. 198 .....	A29.3:31
Forecasting for rivers of small drainage area, especially those of North Carolina. 1902. p. 158 .....	A29.3:31
North Carolina, climate and crops in, 1889–1898. p. 58 .....	A27.9:5
Spring, advent of. 1902. p. 69 .....	A29.3:31
Herz, Joseph. Milk, water to, quantitative determination of addition of, and removal of cream therefrom. 1888. p. 168.....	A7.3:24
Herzegovina. <i>See</i> Bosnia and Herzegovina.	
Hesperogenia, a new genus of umbelliferæ, from Mount Rainier (Coulter). 1899. p. 203 .....	A6.5:5
Hesperomys, new species of, from southern Florida, description of (Merriam). 1890. p. 53.....	A5.5:4
Hessian fly:	
Bibliography of. 1883. p. 245 .....	A8.1:3
California, note on. 1886. p. 43 .....	A9.3:12
Circular relative to (Marlatt) .....	A9.5:12
Importation of parasite from Europe (Forbes). 1891. p. 179....	A9.7:4
Life history of, new notes on (Marten). 1891. p. 265 .....	A9.7:3
New York State in 1901 (Felt). 1902. p. 22.....	A9.6:31
North America, early references to occurrence of. 1883. App., p. 3.	A8.1:3
Not imported from Europe (Hagen). 1883. App., p. 43.....	A8.1:3
Remarks on (Riley). 1888. p. 107.....	A9.7:1
Russia (Koeppen). 1883. App., p. 41 .....	A8.1:3
Silesia in 1869 (Cohn). 1883. App., p. 39.....	A8.1:3
Spring brood of, time of emergence and oviposition of (Garman). 1902. p. 127 .....	A10.3:115
United States, report on (Osborn). 1898.....	A9.6:16
<i>See also</i> Rye gall-gnat.	
Heteroptera of Death Valley expedition (Uhler). 1893. p. 260....	A5.5:7
Hevelius, halo of, notes on (Kimball). 1901. p. 566.....	A29.6:29
Hewitt, Sarah Cooper. Country roads, repairs of. 1894. p. 17....	A22.3:8
Heyward, D. C. Roads, good, suggestions to friends of. 1902. p. 47.	A22.3:23
Hibernation. <i>See</i> Insects.	
Hicklin, J. Brown, short biography of. 1901. p. 119 .....	A29.6:29
Hickman, J. F.:	
Cereals, variety testing in; how can it be rendered more decisive? 1891. p. 97.....	A10.3:7
Plants, testing varieties, report on. 1891. p. 103.....	A10.5:3
Hickman, Richard W. Scabies in cattle, description and treatment. 1902 .....	A1.9:152
Same. 1902.....	A4.3:40
Hicks, Gilbert Henry:	
Grass seed and its impurities. 1898. p. 473.....	A1.10:898
Oil-producing seeds. 1895. p. 185 .....	A1.10:895

# Index

	Classification no.
Hicks, Gilbert Henry—Continued	
Seeds—	
agricultural, standards of purity and vitality of. 1896.....	A6.4:6
germination of, as affected by certain chemical fertilizers. 1900.	A6.3:24
pure, investigation. 1894. p. 389.....	A1.10:894
Hicks, Gilbert Henry, and Dabney, John C.:	
Seed, large, heavy, superior value of. 1896. p. 305.....	A1.10:896
Seed treated with carbon bisulphid, vitality of. n. d.....	A6.4:11
Hicks, Gilbert Henry, and Key, Sothoron. Seed testing, additional notes on. 1897. p. 441.....	A1.10:897
Hicks, Lewis E.:	
Stratigraphy and hydrology of Nebraska. 1890. p. 71.....	A15.2:Ar7
Underflow and sheet waters, irrigable lands and geological structure of Nebraska, with its effect upon water supply. 1893. pt. 3, p. 167.....	A15.2:Ir7 <sup>2</sup>
Hide-powder:	
Comparative tests, report on (Krug). 1901. p. 133.....	A7.3:62
Comparison with filter-tube method (Wiley and Krug). 1901. p. 136.....	A7.3:62
Shake method of determining tannin by, notes on points of error in (Yocum). 1894. p. 204.....	A7.3:43
<i>See also</i> Filter-tube method.	
Hides:	
Cattle, shipped to United States, disinfection of. p. 508.....	A4.1:899
Injury to, by branding (Fitch). p. 509.....	A4.1:899
Skins and, imports of, from Calcutta (Patterson). p. 523.....	A4.1:898
Higbee, E. E. Arbor Day for the commonwealth. p. 28.....	A1.8:56
Higbie-Armstrong road improvement act. 1900.....	A22.4:35
Higbie State aid road bill, remarks at hearing by committees of senate and assembly at Albany, N. Y., February 25, 1897, on (Stone). p. 10.....	A22.4:28
Higgins, John C. Scotland, agriculture and dairying in. p. 213....	A4.1:898
Highmore, S. Dak., range grass and forage plant experiments, cooperative, at (Scribner). 1899.....	A3.4:21
Same, progress report (Scribner). 1901.....	A3.4:33
Highways:	
American, functions of Government, State, and county in improvement of (Holmes). 1901. p. 39.....	A22.3:21
Bonding system for improvement of (Bond). 1902. p. 38.....	A22.3:22
Construction and maintenance (Ashburner). 1895. p. 32.....	A22.3:11
Convicts on, working (Stone). 1895. p. 11.....	A22.3:16
Europe and America (Eldridge). 1902. p. 19.....	A22.3:23
Government aid in improvement of (Brigham). 1902. p. 33....	A22.3:25
Improved (Tessier). 1902. p. 60.....	A22.3:23
Improvement of—	
report on (Dickinson). 1902. p. 48.....	A22.3:25
shall farmer have aid for, from wealth of nation? (Bailey). 1901. p. 63.....	A22.3:21
Legislation in New York, history of (Wright). 1901. p. 29....	A22.3:21
Maintenance and repairing. 1896.....	A22.4:24
Public, alignment of (Patton). 1902. p. 74.....	A22.3:23
State, in Massachusetts (Perkins). 1894. p. 505.....	A1.10:894
Taxation, comparative results of labor and money systems. 1894.	A22.4:16
same, revised.....	A22.4:24
<i>See also</i> Roads.	
Highways of commerce (Haupt). 1901. p. 56.....	A22.3:21
Hilgard, Eugene Woldemar:	
Agricultural colleges, preparatory teaching in. 1898. p. 61....	A10.3:49
Agriculture and soils of California. p. 476.....	A1.1:878
Alkali lands, origin, value, and reclamation of. 1895. p. 103...	A1.10:895
Alkali soils and waters in California, 1888-89. p. 297.....	A15.2:P94 <sup>1</sup>
California—	
exotic fruits and useful plants of. 1892. p. 137.....	A1.8:20
frosts in. 1896. p. 166.....	A29.6:24
phylloxera in. 1892. p. 155.....	A1.8:20
wines and brandies. p. 109.....	A1.8:20

	<b>Index</b>
	<b>Classification no.</b>
Hilgard, Eugene Woldemar—Continued	
Pacific slope—	
climates of. 1892. p. 9.....	A1.8:20
miscellaneous field cultures on. 1892. p. 79.....	A1.8:20
Salts in alkali soils, distribution of. 1896. p. 66.....	A10.3:30
Soil, relations of, to climate. 1892.....	A29.3:3
Soil analysis—	
late progress in. 1896. p. 88.....	A10.3:30
objects and interpretation of. 1886. p. 29.....	A7.3:10
objects and methods of. 1897. p. 84.....	A7.3:51
physical and chemical, report on methods of. 1892. p. 60...	A7.3:38
summary of discussion on, from an article on cotton production	
of United States. p. 170.....	A1.1:885
Soils, nitrogen hungriness in, recognition of. 1895. p. 58.....	A7.3:47
Water supply, subterranean, of San Bernardino Valley and its	
utilization, studies of. 1902. p. 103.....	A10.3:119
Hilgard, Eugene Woldemar, Jones, T. C., and Furnas, Robert W.	
Climatic and agricultural features, and agricultural practices	
and needs of arid regions of Pacific slope, with notes on	
Arizona and New Mexico. 1882.....	A1.8:20
Hill, George G.:	
Farm buildings, practical suggestions for. 1901.....	A1.9:126
Marketing farm products. 1897.....	A1.9:62
<i>See also</i> , as joint author, Wilson, James W.	
Hill, George William:	
English farms and farmers, notes on some. 1898. p. 583.....	A1.10:898
Publications Division, Agriculture Department, work of, for	
farmer. 1897. p. 204.....	A1.10:897
William Saunders, sketch of life of. 1900. p. 625.....	A1.10:900
<i>See also</i> , for reports as Chief, Records and Editing Bureau, 1890-94;	
Chief, Division of Publications, 1895-98; and Editor and Chief,	
Division of Publications, 1895-1902.....	A21.1:
Hill, Robert Thomas:	
Artesian and underground waters in Texas, eastern New Mexico,	
and Indian Territory west of 97th meridian. 1893. pt. 3,	
p. 41.....	A15.2:Ir7 <sup>2</sup>
Forest conditions of Porto Rico, note on. 1899.....	A13.3:25
Imbibition of rocks. 1891. p. 213.....	A15.2:P94 <sup>1</sup>
Hill, W. E. Texas fever among cattle in Kansas. 1897. p. 318..	A4.1:895-6
Hill, W. T. Sparrows, trapping of, for sporting purposes; with pa-	
per descriptive of apparatus and methods employed. 1889.	
p. 178.....	A5.3:1
Hillman, F. H. Seeds of rescue grass and chess. 1902.....	A19.3 <sup>a</sup> :R31
Hills, J. L. Skim milk, what is most profitable way to dispose of?	
1896. p. 95.....	A10.3:41
Hiltner, Robert S. Sugar analysis, report on. 1898. p. 87.....	A7.3:56
Hinds, W. E.:	
Carbon bisulphid as an insecticide. 1902.....	A1.9:145
Carbon bisulphide, fumigation with. 1901. p. 78.....	A9.6:30
Hines, C. M. Swine plague in Cass County, Nebraska. 1879. p. 177.	A1.6:12
Hinkley, Nelson P. Horses, export of, from Buffalo, N. Y., and	
vicinity. 1898. p. 88.....	A1.2:H78
Hinman, C. I. Medicine Lodge, Kansas, notes on field work at.	
1893. p. 31.....	A7.3:40
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Hinrichs, Gustavus. Rainfall laws, deduced from twenty years'	
observations. 1893.....	A29.2:R13
Hinton, Richard Josiah:	
Address of, before convention of National League for Good Roads,	
Washington. 1893. p. 56.....	A10.3:14
Agriculture in Mexico. 1884. No. 13. p. 27.....	A27.9:22
Irrigation and cultivation of soil thereby; physical data; condi-	
tions and progress within U. S. for 1891.....	A15.2:Ir7 <sup>2</sup>
Irrigation in Australia; recent investigations, legislation, and	
administration by colonies of Victoria and New South Wales.	
1891. p. 235.....	A15.2:P94 <sup>1</sup>

# Index

	Classification no.
Hinton, Richard Josiah—Continued	
Irrigation in various countries, facts and conditions relating to.	
1891. pt. 1. p. 375 .....	A15.2:Ir7 <sup>2</sup>
Irrigation in United States. 1887.....	A15.2:Ir7 <sup>1</sup>
Irrigation in United States. 1890, progress report on. 1891.....	A15.2:P94 <sup>1</sup>
<i>See also</i> , for reports as special agent in charge artesian and under- flow investigation and irrigation inquiry, 1890 and 1891 .....	A15.1:
Hinton, Richard Josiah, and others. Artesian wells within area of ninety-seventh meridian and east of foothills of Rocky Moun- tains, preliminary investigation to determine .....	A15.2:Ar7
Hippelates plague in Florida (Schwarz). 1895. p. 374 .....	A9.7:7
Hitchcock, A. S.:	
Bermuda grass. 1901 .....	A3.4:31
Flora of southwestern Kansas, collection of plants made by C. H. Thompson in 1893, report on. 1896. p. 537 .....	A6.5:3
Forage crops, cultivated, of Northwestern States. 1902 .....	A19.3:31
Hitchcock, Frank Harris:	
Agricultural exports of United States, distribution of—	
1894–1898 .....	A12.3:16
1895–1899 .....	A12.3:20
1896–1900 .....	A12.3:25
1897–1901 .....	A12.3:29
Agricultural imports of United States, sources of—	
1894–1898 .....	A12.3:17
1895–1899 .....	A12.3:21
1896–1900 .....	A12.3:24
1897–1901 .....	A12.3:28
Agricultural imports of the United Kingdom, 1896–1900. 1902...	A12.3:26
Agricultural products, our foreign trade in—	
1893–1897 .....	A12.3:10
1894–1898 .....	A12.3:15
1890–1899 .....	A12.3:19
1891–1900 .....	A12.3:23
1892–1901 .....	A12.3:27
Denmark, trade of. 1900 .....	A12.3:9
Egyptian cotton, exports of. 1897. p. 29.....	A10.3:42
Foreign markets for American agricultural products, testimony before Industrial Commission relative to. 1901.....	A1.8:67
Foreign Markets Section, Agriculture Department, work of, for farmer. 1897. p. 270 .....	A1.10:897
Philippine Islands—	
plant products of, notes on. 1899.....	A6.4:17
trade of. 1898 .....	A12.3:14
Puerto Rico, trade of. 1898 .....	A12.3:13
Scandinavia, our trade with, 1890–1900 .....	A12.3:22
Spain, our trade with, 1888–1897.....	A12.3:12
Spain's foreign trade. 1898 .....	A12.3:11
Trade, our, with Japan, China, and Hongkong, 1889–1899.....	A12.3:18
<i>See also</i> , for reports as Chief, Section of Foreign Markets, Agricul- ture Department, 1897–1902 .....	A12.1:
Hite, George H. Strawberry culture. p. 139 .....	A1.1:863
Hoard, H. E. Address of, before convention of National League for Good Roads, Washington. 1893. p. 48.....	A10.3:14
Hoard, William Dempster. Farmers' institute, relation of, to our industrial population. 1902. p. 20 .....	A10.3:110
Hobbs, Hermann E. Volcanic and atmospheric phenomena. 1902. p. 487 .....	A29.6:30
Hodgson, E. J. Address of, before Minnesota good roads con- vention, Jan., 1894. p. 15.....	A22.3:2
Hoffman, J. D. Mechanic arts, student apprentice of. 1901. p. 186.	A10.3:99
Hoffmanseggia, North American species of, revision of (Fisher). 1892. p. 143.....	A6.5:1
Hog and its products (Cist). p. 382 .....	A1.1:866
Hog-cholera bacillus:	
Associated with fatal disease in pigeons (Moore). 1895. p. 71...	A4.3:8
Can bacillus of hog cholera be increased in virulence by passing it through a series of rabbits? (Moore). 1894. p. 97 .....	A4.3:8

<b>Hog-cholera bacillus—Continued</b>	
Experiments on attenuation of, by heat. p. 117 .....	A4.1:887-8
same, p. 175 .....	A1.1:888
Experiments on production of immunity in rabbits and guinea-pigs with reference to swine plague and (Smith and Moore). 1894. p. 41 .....	A4.3:6
Group of hog-cholera bacteria (Smith). 1894. p. 9 .....	A4.3:6
Variety of, which closely resembles bacillus typhosus (Dorset). p. 566 .....	A4.1:901
What becomes of hog-cholera and swine-plague bacteria when injected in small numbers into subcutaneous tissues of pigs? (Moore). 1894. p. 103 .....	A4.3:6
<b>Hog cholera:</b>	
Communication of, by carrion crows (Ford). p. 325 .....	A4.1:895-6
Germ of, enzymes, or soluble ferments of (De Schweinitz). p. 266 .....	A4.1:898
<i>See also</i> Hog-cholera bacillus.	
History, nature, and treatment, as determined by inquiries and investigations of Bureau of Animal Industry (Salmon). 1889. Idaho (Williams). 1898. p. 179 .....	A1.8:46
Indiana (Bitting). p. 199 .....	A4.1:897
Inoculation for prevention of, results of experiments with (Salmon). 1892 .....	A4.1:897
Introduction and spread of, in U. S., correspondence relating to. p. 187 .....	A1.9:8
Investigations in Iowa, preliminary report (De Schweinitz). p. 501 .....	A4.1:887-8
Investigations of—	
1886. p. 603 .....	A4.1:889
same, p. 20 .....	A1.1:886
1887. p. 481 .....	A4.1:886
same, p. 63 .....	A1.1:887
Iowa (Niles). p. 500 .....	A4.1:887-8
Note on—	
1866. pp. 56, 127 .....	A4.1:898
1868. p. 320 .....	A27.9:4
1884 (Trumbower), p. 419 .....	A27.9:6
same, p. 238 .....	A4.1:884
Prevention of. p. 148 .....	A4.2:An5
same, p. 156 .....	A4.1:887-8
Report on (Law). 1875. p. 426 .....	A1.1:888
Report on swine plague and (Salmon) .....	A1.1:875
Serum therapy in (Peters). p. 196 .....	A1.9:24
Serum treatment for (De Schweinitz). p. 235 .....	A4.1:897
same .....	A4.1:898
Stamping out, in Page County, Iowa, experiments in. p. 249 .....	A4.3:23
Sweden, Denmark, and France. p. 159 .....	A4.1:898
same, p. 168 .....	A4.1:887-8
Variability of infectious diseases as illustrated by (Smith and Moore). 1894. p. 81 .....	A1.1:888
Variety of, which closely resembles bacillus typhosus (Dorset). p. 566 .....	A4.3:6
<i>See also</i> Cattle orders—Swine plague.	
Hog fever, investigation of, in North Carolina (Salmon). p. 432 .....	A4.1:901
Hogan, Mrs. Louise E. Shimer (reporter). Cooking, instruction in, in public schools of New York, history and present status of, with introduction by Alfred Charles True. 1899 .....	A1.1:878
Hogg, Thomas. Japan, flora of. 1875. p. 178 .....	A10.3:56
Hogs:	
Alfalfa hay for. 1899. p. 15 .....	A27.9:13
Common, of Florida, crossing improved breeds of swine with (Furnas). 1895 .....	A1.9:97
Conditions affecting price of. p. 96 .....	A4.4:4
same. p. 84 .....	A1.1:890
Crop, 1850-63. No. 6. p. 20 .....	A4.1:889-90
Dead, uses of. 1886. p. 251 .....	A27.9:1
Fattening. 1863. No. 5. p. 5 .....	A27.9:24
	A27.9:1

# Index

	Classification no.
<b>Hogs—Continued</b>	
Feeding sheaf wheat to (French). p. 495 .....	A4.1:898
Packed at Cincinnati, 1833-64. No. 6. p. 33. ....	A27.9:2
Peanuts, cowpeas, and sweet potatoes as food for (Duggar). p. 501 .....	A4.1:898
Pork packing and, in West (Emery). p. 198 .....	A1.1:863
Raising in Northwest (French). 1900. p. 16 .....	A1.9:117
Raising in the South (Tracy). 1899 .....	A1.9:100
same. p. 362 .....	A4.1:899
Silage for (Beal). 1898. p. 20 .....	A1.9:103
Stock, for market. p. 101 .....	A4.1:893-4
<i>See also</i> Cattle orders—De Soto hogs—Farm animals—Hog cholera—Swine plague.	
Hogue, Alveto S. Animals, dead, disposition of, in Vienna. p. 350.	A4.1:899
Holcombe, A. A.:	
Horse, fetlock, ankle, and foot of, diseases of. p. 357 .....	A4.2:H78
Sheep-scab mite and low temperature. p. 605 .....	A4.1:901
Holcombe, J. W. Agricultural and mechanical colleges, relation of, to Department of Interior. 1893. p. 114 .....	A10.3:16
Holden, E. S. San Joaquin County, California, resources of. 1868. p. 363 .....	A27.9:6
Holidays. <i>See</i> Legal holidays.	
Holladay, A. L. Grape vine, black-rot and mildew of, experiments in treatment of. 1890. p. 70 .....	A6.3:11
Holland, E. B. <i>See</i> , as joint author, Lindsey, Joseph Bridges.	
Holland, reclamation of lands in, reports of State geologist of New Jersey, 1869 and 1870. p. 221 .....	A1.7:7
<i>See also</i> Java.	
Holland agricultural experiment stations:	
Official methods of analysis of fertilizers and feeding stuffs adopted by. 1899. p. 304 .....	A10.6:10
Report on (Atwater). 1895. p. 669 .....	A10.6:5
Holloway, William R.:	
Animals, dead, disposition of, in St. Petersburg. p. 360 .....	A4.1:899
Eggs, exports of Russian. p. 512 .....	A4.1:900
Leather industry of Russia. p. 528 .....	A4.1:899
Hollyhock disease, new (Southworth). 1891. p. 45 .....	A28.5:6
Hollyhocks, sawfly, new, which is injurious to (Cockerell). 1894. p. 251 .....	A9.7:7
Holm, Theo. Panciums, American, in herbarium Berolinense and in herbarium of Willdenow. 1897. p. 17 .....	A3.3:4
Holmes, Edwin S., jr.:	
Brazos River, Texas, flood of June-July, 1899, its effects upon agriculture of submerged region. 1899 .....	A27.4:10
Fruit industry of California, statistics of. 1901 .....	A27.8:23
Wheat-growing and general agricultural conditions in Pacific coast region. 1901 .....	A27.8:20
Wheat ports on Pacific coast. 1901. p. 567 .....	A1.10:901
<i>See also</i> , as joint author, Ward, Edward G., jr.	
Holmes, George Kirby:	
Agricultural production and prices. 1897. p. 577 .....	A1.10:897
Agriculture, progress of, in U. S. 1899. p. 307 .....	A1.10:899
Farm implements and machinery, course of prices of, for series of years. 1901 .....	A27.8:18
Holmes, Joseph Austin:	
Address of, before national road conference, July, 1894. p. 17...	A22.3:10
Agricultural education in North Carolina. 1883. p. 84 .....	A1.7:2
Convict labor, use of, in road improvement in North Carolina. 1895. p. 5 .....	A22.3:16
Highway improvement, American, functions of Government, State, and county in. 1901. p. 39 .....	A22.3:21
Road building in Southern States, some essentials in modern systems of. 1902. p. 82 .....	A22.3:23
Road building with convict labor in Southern States. 1901. p. 319.	A1.10:901
Roads, public, improvement of, in North Carolina. 1894. p. 513.	A1.10:894
Holmes, J. Garnett. Soil survey around Santa Ana, Cal. p. 385. <i>1</i>	A26.5:900 <sup>1</sup>
<i>See also</i> , as joint author, Means, Thomas Herbert.	



Holmes, J. Garnett, and Mesmer, Louis:	
Soil survey of San Gabriel area, California. p. 559.....	A26.5:901 <sup>1</sup>
Soil survey of Ventura area, California. p. 521.....	A26.5:901 <sup>1</sup>
Holstein cattle (Chenery). p. 161.....	A1.1:864
Holt, J. O. Meteorological observations near Circle City, Alaska. 1896-98. p. 542.....	A29.6:26
Holzinger, John M.:	
Plants—	
collected by C. S. Sheldon and M. A. Carleton in the Indian Territory in 1891, list of. 1892. p. 189.....	A6.5:1
collection of, made by J. H. Sandberg and assistants in north- ern Idaho in 1892, report on. 1895. p. 205.....	A6.5:3
new, from Texas and Colorado, descriptions of. 1893. p. 286.	A6.5:1
new to Florida, list of. 1893. p. 288.....	A6.5:1
Home fruit garden, preparation and care of (Corbett). 1901. p. 431.	A1.10:901
Same.....	A1.9:154
Home vineyard, with special reference to northern conditions (Ragan). 1902.....	A1.9:156
Homes, rural, adornment of (Vasey). 1872. p. 448.....	A27.9:10
Honey:	
Adulteration of (Wiley and others). 1892. p. 633.....	A7.3:13 <sup>6</sup>
Production of, 1889-89. p. 112.....	A27.9:32
<i>See also</i> Bees.	
Honey bee. Manual of instruction in apiculture (Benton).....	A9.6:1
<i>See also</i> Bees—Italian honey bee.	
Honey Lake Basin, California, irrigation problems of (Smythe). 1901. p. 71.....	A10.3:100
Hongkong:	
Our trade with, 1889-1899 (Hitchcock).....	A12.3:18
Typhoon of Nov. 10, 1900, in, note on (Abbe). p. 558.....	A29.6:28
Weather forecasting in (Doberck). 1899. p. 98.....	A29.6:27
Honolulu, Hawaii:	
Meteorological observations, monthly, at, Mar., 1894-April, 1901 (Lyons).....	A29.6:
Tables of dew-point observed at (Lyons). 1899. p. 587.....	A29.6:27
Hookworm disease (uncinariasis or ancylostomiasis), significance of recent American cases of, in man (Stiles). p. 183.....	A4.1:901
Hooper, John K. Halo at Detroit, Mich., May, 1900. p. 202.....	A29.6:28
Hop crops, European. 1868. p. 409.....	A27.9:6
Hop plant:	
Cultivation of (Bollman). p. 97.....	A1.1:864
same. No. 1. p. 5.....	A27.9:3
same, in Bohemia (Fairchild). 1899.....	A6.4:19
same, in California (Flint). 1900.....	A1.9:115
same, in England. 1870. p. 486.....	A27.9:8
same, in Pacific coast region. 1889. p. 410.....	A27.9:27
same, in various countries. 1888. p. 537.....	A27.9:26
Insects affecting (Smith). p. 393.....	A1.1:884
same (Smith). 1884. p. 9.....	A9.3:4
same (Howard). 1897. p. 40.....	A9.6:7
<i>See also</i> Crops, principal.	
Hop plant-louse:	
Experiments with, in Oregon and Washington (Koebele). 1893. p. 12.....	A9.7:6
Experiments with remedies against (Alwood). p. 102.....	A1.1:888
same. p. 102.....	A9.1:888
Further notes on (Riley). 1888. p. 70.....	A9.7:1
Remedies to be used against.....	A9.5:2
Hop substitutes. <i>See</i> Quassia.	
Hopkins, Andrew Delmar:	
Entomologist, economic, note and record keeping for. 1893. p. 103.....	A9.7:6
Forest entomology, study of, in America. 1902. p. 5.....	A9.6:37
Forest-tree insects, study of. 1895. p. 75.....	A9.6:2
Forests—	
damage to, by destructive pine bark-beetle. 1893. p. 187....	A9.7:5
insect enemies of, in Northwest, preliminary report on. 1899.	A9.6:21

# Index

	Classification no.
<b>Hopkins, Andrew Delmar—Continued</b>	
Insects detrimental and destructive to forest products used for constructing material. 1902. p. 60.....	A9.6:31
Pine in Black Hills Forest Reserve, insect enemies of. 1902.....	A9.6:32
Scolytids, destructive, and their imported enemy. 1893. p. 123.....	A9.7:6
Spruce, insect enemies of, in Northeast. 1901.....	A9.6:28
West Virginia—	
entomological discoveries and observations of year in. 1894. p. 145.....	A9.7:7
insects, some notes on. 1898. p. 44.....	A9.6:17
observations in, on farm, garden, and fruit insects, some notes on. 1896. p. 71.....	A9.6:6
some bred braconidæ. 1892. p. 256.....	A9.7:4
<b>Hopkins, Cyril George:</b>	
Alkalies in soil analysis, separation of, by official method. 1902. p. 43.....	A7.3:67
Soil analysis, mechanical, rapid method of, including use of centrifugal force. 1898. p. 67.....	A7.3:56
Soil particles, division of, in mechanical analysis, plea for scientific basis for. 1898. p. 64.....	A7.3:56
Soils, samples of, method for taking, for analysis. 1902. p. 152.....	A7.3:67
Hopkins, Cyril George, and Powers, W. A. Milk and cream, acidity of, determination of. 1895. p. 125.....	A7.3:47
Hopkins, C. L. <i>Vanessa californica</i> , mountain swarming of. 1890. p. 355.....	A9.7:2
Hopkins, J. Howard. Weather prophet, every man his own. 1899. p. 293.....	A29.6:27
<b>Hopkins, James D.:</b>	
Animals, domestic, in U. S., contagious diseases among, investigation of. 1883. p. 44.....	A1.8:29
Pleuro-pneumonia among cattle in New York, investigation of. p. 43.....	A1.1:881-2
<b>Hordeum</b> , genera, native and introduced species of (Scribner and Smith). 1897. p. 23.....	A3.3:4
<b>Horgen</b> , Switzerland. Cost of hauling farm products over wagon roads at (Streuli). p. 12.....	A22.4:27
<b>Horn fly:</b>	
Ohio, note on (Kellicott). 1891. p. 35.....	A9.7:4
Remedies for, notes on (Alwood). 1891. p. 68.....	A9.7:4
Report on. 1889. p. 93.....	A9.7:2
<b>Hornia</b> , description of <i>Leonia rileyi</i> , new meloid genus near (Duges) 1889. p. 211.....	A9.7:1
<b>Hornworm</b> of tobacco. <i>See</i> <i>Protoparce carolina</i> .	
<b>Horr</b> , Thomas J. <i>See</i> , as joint author, McLean, L.	
<b>Horse-radish:</b>	
Best varieties of Europe, and methods of cultivation (Fairchild). 1900.....	A23.4:1
Circular on (Kains). 1898.....	A6.4:15
Culture in Bohemia (Fairchild). 1899.....	A6.4:20
Horse-radish flea-beetle, report of (Chittenden). 1895. p. 404.....	A9.7:7
<b>Horse breeders' associations</b> , list of, with officers:	
1898. p. 613.....	A1.10:898
1899. p. 693.....	A1.10:899
1900. p. 647.....	A1.10:900
1901. p. 625.....	A1.10:901
<i>See also</i> Vermont Association of Horse Breeders.	
Horse show, Chicago, Ill., 1890 (Martin). p. 349.....	A4.1:889-90
<b>Horses:</b>	
American—	
importation of, into Brussels (Langhorne). 1897. p. 26.....	A1.2:H78
in Belgium (Storer). 1897. p. 24.....	A1.2:H78
in Denmark (Kirk). 1898. p. 53.....	A1.2:H78
in Switzerland (Gifford). p. 503.....	A4.1:900
market for, in foreign countries. 1898.....	A1.2:H78
thoroughbred, in England (Wray). p. 503.....	A4.1:899
used by large horse companies in Paris (Loncey). 1898. p. 42.....	A1.2:H78
Barley as food for. 1901. p. 29.....	A1.9:133

**Horses—Continued**

Blood, essay on (Jackson). 1882. p. 50.....	A1.8:22
Bottom disease among, in South Dakota (Schroeder). p. 371....	A4.1:891-2
Bots in. 1866. p. 436.....	A27.9:4
<b>Breeding—</b>	
Belgium (Winslow). p. 503.....	A4.1:900
England. 1875. p. 513.....	A27.9:13
for turf, road, and farm (Sanders). 1883. p. 229.....	A1.7:2
national, military administration of Germany in its relations to. p. 372.....	A4.1:898
New Jersey (Romaine). p. 385.....	A4.1:889-90
report on, etc. (Gaines). p. 122.....	A1.7:2
<b>Cavalry—</b>	
America (Morris). p. 159.....	A1.1:863
Great Britain's purchases of, in Argentina (Buchanan). 1898. p. 22.....	A1.2:H78
Cerebro-spinal meningitis in (Neale). p. 470.....	A4.1:899
Demand for and kind of, suited for European uses and present status of horse trade in different countries (Stubbs). 1898. p. 55.....	A1.2:H78
Digestive organs of, diseases of (Michener). p. 15.....	A4.2:H78
Diseases among mules and. 1868. p. 360.....	A27.9:6
Diseases among, in Illinois (Detmers). p. 355.....	A1.1:881-2
<b>Diseases of—</b>	
correspondence relating to. 1877. p. 471.....	A1.1:877
same. 1898. p. 537.....	A4.1:898
general (Huidekoper). p. 461.....	A4.2:H78
report on. 1890.....	A4.2:H78
Draft upon (Fulton). p. 511.....	A4.1:898
Enzoötic cerebro-spinal meningitis in Idaho (Williams). 1898. p. 179.....	A4.1:897
Enzoötic cerebro-meningitis among, in Texas (Detmers). p. 363.....	A1.1:881-2
<b>Export of—</b>	
Buffalo, N. Y., and vicinity (Hinkley). 1898. p. 88.....	A1.2:H78
Chicago market (Bruette). 1897. p. 84.....	A1.2:H78
Eye of, diseases of (Law). p. 247.....	A4.2:H78
Feeding of, notes on (Lavalard). 1902. p. 4.....	A10.6:12
Fetlock, ankle, and foot of, diseases of (Holcombe). p. 357.....	A4.2:H78
Foot of, structure and diseases of. p. 357.....	A1.1:870
France (Green). 1898. p. 39.....	A1.2:H78
Generative organs of, diseases of (Law). p. 135.....	A4.2:H78
German army, requirements for (Kuhn). 1898. p. 31.....	A1.2:H78
<b>Glanders among—</b>	
report on (Trumbower). p. 418.....	A4.1:884
same, p. 237.....	A4.2:An5
Texas (Folsetter). p. 393.....	A4.1:889-90
Heart and blood-vessels of, diseases of (Trumbower). p. 219....	A4.2:H78
<b>Imported into U. S., regulations for inspection and quarantine of, Dec. 28, 1899.....</b>	
same, modification, Jan. 27, 1900.....	A4.5:56
same, amendment, June 1, 1900.....	A4.5:58
same, amendment, Oct. 20, 1900.....	A4.5:64
same, amendment, Nov. 10, 1900.....	A4.5:77
same, amendment, Nov. 10, 1900.....	A4.5:79
Industry of the Northwest (Nelson). 1900. p. 23.....	A1.9:117
Influenza in (Law). p. 203.....	A1.1:872
Lameness of, its causes and treatment (Liautard). p. 269.....	A4.2:H78
Leeches among, in Florida (Fish). p. 229.....	A4.1:895-6
<b>Maladie du coit among—</b>	
Nebraska and South Dakota, extirpation of (Norgaard). p. 62.....	A4.1:893-4
Nebraska (Faville). p. 359.....	A4.1:891-2
Market classes of (Rommel). p. 433.....	A4.1:901
same. 1902.....	A4.3:37
<b>Meat of—</b>	
American, in Denmark (Blom). p. 505.....	A4.1:900
as food in Germany (Guenther). p. 520.....	A4.1:900
Medicines to, methods of administering (Michener). p. 9.....	A4.2:H78

# Index

	Classification no.
<b>Horses—Continued</b>	
Millet disease of. 1898. p. 20.....	A1.9:69
same. p. 539 .....	A4.1:898
National horse of America (Macleod). p. 691 .....	A1.1:887
Nervous system of, diseases of (Trumbower). p. 181 .....	A4.2:H78
Notes on. 1876. p. 119 .....	A27.9:14
Ocean transportation of. p. 87 .....	A4.1:900
Pneumonia among (Clement). p. 381.....	A4.1:889-90
Potato bread for, in Germany (Hughes). p. 530.....	A4.1:899
Principles of form required to adapt him to special purposes, notices of breeds, etc. (Howard). p. 335 .....	A1.1:862
Report on, from practical experience in Army, origin and usefulness (Ringwalt). p. 321 .....	A1.1:866
Respiratory organs of, diseases of (Harbaugh). p. 87.....	A4.2:H78
Shipping, to Germany, experience and observation in (Meyers). 1898. p. 35 .....	A1.2:H78
Shoeing of (Dickson). p. 529 .....	A4.2:H78
Silage for (Beal). 1898. p. 20 .....	A1.9:103
Skin of, diseases of (Law). p. 419.....	A4.2:H78
"Staggers" among, in Virginia and North Carolina (Harbaugh). p. 209 .....	A4.1:886
Switzerland (Du Bois). p. 520 .....	A4.1:898
Trade of U. S. with foreign countries. p. 600.....	A4.1:901
Trade with Great Britain (Wellman). 1897. p. 45.....	A1.2:H78
same. 1898 (Wray). p. 50.....	A1.2:H78
Urinary organs of, diseases of (Law). p. 59 .....	A4.2:H78
Urine of, analysis (Caldwell). p. 247.....	A1.1:872
Wounds of, and their treatment (Michener). p. 447.....	A4.2:H78
<i>See also</i> Animals, domestic—Conestoga horse—Farm animals—French Napoleon stallion—Mares—Roadsters and trotters.	
<b>Horticultural and kindred societies, officers of:</b>	
1898. p. 621 .....	A1.10:898
1899. p. 704 .....	A1.10:899
1900. p. 658 .....	A1.10:900
1901. p. 631 .....	A1.10:901
<b>Horticultural commission, Los Angeles County, Cal., report of.</b>	
1890. p. 312 .....	A9.7:2
<b>Horticultural exhibition, international, proposed to be held at Hamburg, note on. 1869. p. 63 .....</b>	A27.9:7
<b>Horticultural herbarium, making of (Davy). 1900. p. 93 .....</b>	A10.3:76
<b>Horticultural periodicals. <i>See</i> Agricultural and horticultural periodicals.</b>	
<b>Horticultural quarantine rules of California. 1892. p. 168 .....</b>	A1.8:20
<b>Horticultural school. <i>See</i> Ghent, Belgium.</b>	
<b>Horticultural societies, list of:</b>	
1867. p. 364 .....	A1.1:867
1869 .....	A1.2:So1
1870 .....	A1.8:4
1872 .....	A1.8:5
1876 .....	A1.8:12
1885 .....	A1.8:39
<b>Horticulture:</b>	
Abstracts of reports of agricultural experiment stations on. 1889-1902 .....	A10.6:
American, danger to, from introduction of injurious scale insects (King). 1901. p. 171 .....	A10.3:99
Climatology and—	
report on (Wickson). 1900. p. 45.....	A10.3:76
some interrelations of (Bailey). 1895. p. 431 .....	A29.3:11 <sup>2</sup>
Directory of departments, boards, societies, colleges, and other organizations in interest of. 1885.....	A1.8:39
<i>See also</i> Horticultural societies.	
Education in Minnesota (Green). 1898. p. 84.....	A10.3:49
Educational status of, report on (Card). 1901. p. 134.....	A10.3:99
Experimental, systems of record keeping in (Corbett). 1896. p. 104.....	A10.3:41
Hints in. p. 194 .....	A1.1:868

	<b>Index</b>
	<b>Classification no.</b>
<b>Horticulture—Continued</b>	
How shall we teach horticulture? (Lazenby). 1896. p. 60.....	A10.3:30
Laboratory work in (Goff). 1896. p. 103 .....	A10.3:41
same (Goff). 1901. p. 132 .....	A10.3:99
Outline of work in, at the several agricultural experiment sta- tions (Alwood). 1889.....	A10.3:4
Papers on horticultural and kindred subjects (Saunders). 1891..	A1.8:48
Plant physiology in relation to (Woods). 1901. p. 127.....	A10.3:99
Relation of Arbor Day to (Skinner). p. 34.....	A1.8:56
Teaching, laboratory methods in (Corbett). 1899. p. 127 .....	A10.3:65
Winter instruction in, laboratory work for (Goff). 1900. p. 95 .	A10.3:76
Wisconsin (Peffer). 1882. p. 174.....	A1.8:22
Work in—	
special, letter asking for reports regarding. 1889.....	A10.4:10
State Agricultural Experiment Station, Geneva, N. Y., methods of keeping records of (Beach). 1898. p. 72.....	A10.3:49
Yukon Valley, conditions in, preliminary report on (Jackson). 1898. p. 35 .....	A10.3:48
See also Evans, Walter H.—Rane, F. W.—and headings beginning Horticultural.	
<b>Horticulture and botany section, Association of American Agricul-     tural Colleges and Experiment Stations, report of:</b>	
1891. p. 101 .....	A10.3:7
1892. p. 168 .....	A10.3:16
1893. p. 93 .....	A10.3:20
1894. p. 91 .....	A10.3:24
1895. pp. 14, 94.....	A10.3:30
1896. pp. 21, 99.....	A10.3:41
1897. pp. 13, 72.....	A10.3:49
1898. pp. 21, 126.....	A10.3:65
1899. pp. 28, 87.....	A10.3:76
1900. pp. 13, 127.....	A10.3:99
1901. pp. 52, 102.....	A10.3:115
See also Botany section — Horticulture section.	
<b>Horticulture section, Association of American Agricultural Colleges     and Experiment Stations, report of:</b>	
1890. pp. 34, 151.....	A10.5:3
1892. p. 167 .....	A10.3:16
See also Horticulture and botany section.	
<b>Horticulturists of agricultural experiment stations:</b>	
List of, with outline of work in horticulture at the several sta- tions (Alwood). 1889 .....	A10.3:4
Meeting of, at Columbus, Ohio, June 13, 14, 1889, proceedings of (Harris) .....	A10.3:3
same, report of secretary (Bishop). p. 9.....	A10.3:3
Some undefined duties and methods of (Rane). 1896. p. 76....	A10.3:30
Horton, H. E. L. Sorghum sugar experiments at Rio Grande, N. J. 1889. p. 58.....	A7.3:26
Hosmer, Ralph Sheldon, and Bruce, Eugene S. Forest working plan for township 40, Totten and Crossfield purchase, Hamil- ton County, N. Y., State forest preserve. 1901 .....	A13.3:30
Hosmer, Ralph Sheldon. See, as joint author, Whitney, Milton.	
Hospital gardening. 1865. No. 2. p. 12.....	A27.9:3
Host, color of, and its relation to parasitism (Stiles and Hassall). 1892. p. 265 .....	A9.7:4
Hot waves, conditions which produce them, and their effect on agri- culture (Burrows). 1900. p. 325.....	A1.10:900
Hotze, Mrs. R. S. See, as translator, Plumandon, J. R.	
Hough, Franklin B.:	
Forest condition and lumber and wood trade of New Hampshire and West Virginia. 1884. p. 348 .....	A13.5:4
Forestry, reports on. vols. 1-3 .....	A13.5:
Forestry investigations, progress of. p. 653.....	A1.1:880
Maple sugar, production of, in United States and Canada. 1884. p. 394 .....	A13.5:4
Railroad ties, timber used for, kinds and quantity of. 1884. p. 119.	A13.5:4
Timber lands, American, value of. 1884. p. 5.....	A1.7:5

# Index

	Classification no.
House ants:	
Circular relative to (Marlatt). 1898.....	A9.5:34
Report on (Marlatt). 1896. p. 84.....	A9.6:4
House centipede, circular on (Marlatt). 1902.....	A9.5:48
House flies:	
Circular relative to (Howard). 1898.....	A9.5:35
Notes on (Howard). 1898. p. 63.....	A9.6:10
same, further notes. p. 55.....	A9.6:17
Report on (Howard and Marlatt). 1896. p. 43.....	A9.6:4
<i>See also</i> Flies.	
House numbering and rural road naming (Davidson). 1901. p. 19.	A22.3:21
House plants, cultivation of (Hall). p. 366.....	A1.1:863
House sparrow ( <i>Passer domesticus</i> ), at Saint Louis, Mo., history of (Widmann). p. 191.....	A5.3:1
<i>See also</i> Sparrows.	
Household insects:	
Hydrocyanic-acid gas for exterminating, use of (Beattie). 1902. p. 80.....	A9.6:31
Principal, report on (Howard and Marlatt).....	A9.6:4
Temperature effects on (Howard). 1896. p. 13.....	A9.6:6
Use of hydrocyanic-acid gas against. 1902.....	A9.5:46
<i>See also</i> Insects, and references thereunder.	
Household tests for detection of oleomargarine and renovated butter (Patrick). 1901.....	A1.9:131
Hovenden, Thomas. Kites within a thunder cloud. 1898. p. 251.	A29.6:26
Howard, Burton J. Fruits and fruit products, microscopical examinations of. 1902. p. 103.....	A7.3:66
Howard, C. W.:	
Cotton States, condition of agriculture in. p. 215.....	A1.1:874
Georgia, conditions and resources of. p. 567.....	A1.1:866
Howard, George Ellsworth:	
Chickens, standard varieties of.....	A1.9:51
same. p. 445.....	A1.10:896
Ducks and geese, standard breeds and management. 1897.....	A1.9:64
Howard, Leland Ossian:	
Angoumois grain moth or "fly weevil." 1893. p. 325.....	A9.7:5
Aphelininæ of North America, a subfamily of Hymenopterous of family Chalcididæ, revision of. 1895.....	A9.8:1
Army worm, circular relative to. 1894.....	A9.5:4
Axima, North American, and its habits. 1890. p. 365.....	A9.7:2
Beet-leaf <i>Pegomyia</i> , report of. 1895. p. 379.....	A9.7:7
Box-elder plant bug. 1898.....	A9.5:28
Buffalo gnats, or <i>Simulium</i> , common at Ithaca, N. Y., notes on. 1888. p. 99.....	A9.7:1
California, new beneficial insect in, establishment of. 1900. p. 16.	A9.6:26
Capri fig experiments in California, present status of. 1899. p. 28.	A9.6:20
Carpet beetle, or "Buffalo moth," circular on. 1894.....	A9.5:5
Chalcididæ—	
North American, from collections of U. S. Department of Agriculture and of C. V. Riley, with biological notes; 1st paper, with list of described North American species of family, descriptions of, etc. 1885.....	A9.3:5
pupation among, methods of. 1891. p. 193.....	A9.7:4
Cheese, hams, fruit, and vinegar, some insects affecting. 1896. p. 100.....	A9.6:4
Chinch-bug, report on. p. 51.....	A1.1:887
same. 1888.....	A9.3:17
Coccidæ, parasites of, in collection of Agriculture Department. p. 350.....	A1.1:880
Cockroaches, migration of. 1895. p. 349.....	A9.7:7
Codling moth, report on. p. 88.....	A1.1:887
Cornstalk borer, larger—	
circular on. 1896.....	A9.5:16
report on. 1891. p. 95.....	A9.7:4
Cotton plant, insects affecting. Jan., 1897.....	A1.9:47
same (with introduction). p. 317.....	A10.3:33
Disease, insects as carriers and spreaders of. 1901. p. 177.....	A1.10:901



**Howard, Leland Ossian—Continued**

Elasmus, habits of. 1892. p. 253 .....	A9.7:4
Elm insect, newly imported. 1889. p. 34 .....	A9.7:2
Elm leaf beetle, futility of trunk and crown washing against. 1896. p. 36 .....	A9.6:6
Encyrtid, new and remarkable, is it parasitic? 1890. p. 145 ....	A9.7:3
Entilia sinuata, habits of. 1901. p. 75 .....	A9.6:30
Entomology— economic, progress in, in United States. 1899. p. 135 .....	A1.10:899
official economic, brief account of rise and present condition of. 1894. p. 55 .....	A9.7:7
Entomology Division, Agriculture Department, work of, for farmer. 1897. p. 84 .....	A1.10:897
Europe, two beneficial insects introduced from. 1898. p. 13....	A9.6:17
Fig-eater, or green June beetle, report on. 1898. p. 20.....	A9.6:10
Flies, carriage of disease by. p. 39.....	A9.6:30
Foreign governments, regulations of, regarding importation of American plants, trees, and fruits. 1900 .....	A9.5:41
Fruit trees, important enemy to; San Jose scale, its appearance in eastern United States, etc. 1893 .....	A9.5:3
Gadflies, remedy for, Porchinski's recent discovery in Russia, with some American observations. 1899. p. 24.....	A9.6:20
Grain plant louse, some new parasites of. 1890. p. 246.....	A9.7:2
Grass and grain joint-worm flies and their allies; a consideration of some North American Phytophagic eurytominae. 1896.....	A9.8:2
Grasshoppers, fungous diseases of, experimental work with. 1901. p. 459 .....	A1.10:901
Gypsy moth in America; a summary account of introduction and spread of Porthetria dispar in Massachusetts, and efforts made by State to suppress and exterminate it. 1897.....	A9.6:11
Harlequin cabbage bug, or calico back, circular relative to. 1895.	A9.5:10
Health, how insects affect, in rural districts. 1902.....	A1.9:155
Hibernation of injurious insects, temperature experiments as affecting received ideas on. 1897. p. 18.....	A9.6:9
Hop plant, insects affecting. 1897. p. 40 .....	A9.6:7
House flies, circular on. 1898 .....	A9.5:35
House flies and mosquitoes, notes on. 1898. p. 55 .....	A9.6:17
House fly, further notes on. 1898. p. 63 .....	A9.6:10
Household insects, temperature effects on. 1896. p. 13.....	A9.6:6
Hydrocyanic acid gas, use of, against household insects. 1902...	A9.5:46
Hymenoptera, parasitic, host relations of. 1891. p. 277 .....	A9.7:3
Hymenopterous parasites of California red scale. 1894. p. 227..	A9.7:6
Hyperaspis signata, beneficial work of. 1900. p. 17.....	A9.6:26
Icerya parasite, new, report of. 1892. p. 378 .....	A9.7:4
Icerya purchasi, work against, in Portugal, with account of in- troduction from America of Novius cardinalis. 1898. p. 30..	A9.6:18
Insect parasitism, study in, consideration of parasites of white- marked tussock moth, with account of their habits and inter- relations, with description of a few species. 1897 .....	A9.8:5
Insect pests, danger of importing. 1897. p. 529.....	A1.10:897
Insects, foreign, desirability of an inspection system against. 1897. p. 111 .....	A1.8:57
Insects, injurious— and commerce, report on. 1895. p. 332 .....	A9.7:7
methods of studying life histories of, notes on. 1893. p. 82..	A9.7:6
Irrigation and injurious insects. 1890. p. 215.....	A9.7:2
Kissing bug, insects to which name became applied during sum- mer of 1899. 1900. p. 24.....	A9.6:22
Laws against insects, injurious, in North America, recent, with laws relative to foul brood. 1898 .....	A9.6:13
Legislation against injurious insects; compilation of laws and regulations in U. S. and British Columbia. 1895.....	A9.3:33
Locust, American, damage by. 1894. p. 220.....	A9.7:7
Maple pseudococcus, report of. 1894. p. 235 .....	A9.7:7
Mexican cotton-boll weevil— 1895 .....	A9.5:6 <sup>1</sup>
same (in Spanish) .....	A9.5:6 <sup>2</sup>

# Index

	Classification no.
Howard, Leland Ossian—Continued	
Mexican cotton-boll weevil—Continued	
1896, revised.....	A9.5:14 <sup>1</sup>
same (in Spanish). 1896.....	A9.5:14 <sup>2</sup>
1897, revised.....	A9.5:18 <sup>1</sup>
same (in Spanish) .....	A9.5:18 <sup>2</sup>
same (in German) .....	A9.5:18 <sup>3</sup>
1897, revised.....	A9.5:27
1898 (supplementary) .....	A9.5:33
Mosquitoes—	
different, of North America, how to distinguish.....	A9.5:40
experiment against—	
1892. p. 12 .....	A9.7:5
1893. p. 90 .....	A9.7:6
Mosquitoes and fleas—	
circular on .....	A9.5:13
report on. 1896. p. 9 .....	A9.6:4
Mosquitoes of United States, notes on, giving some account of their structure and biology, with remarks on remedies. 1900.	A9.6:25
Mytilaspis pomorum, new parasite of. 1894. p. 256.....	A9.7:7
Orchard, some scale insects of. 1894. p. 249.....	A1.10:894
Pachyneuron, habits of. 1891. p. 218.....	A9.7:3
Parasite of supposed eggs of cotton stainer. 1889. p. 241 .....	A9.7:1
Parasites—	
icerya, three new. 1889. p. 268 .....	A9.7:1
injurious, report of. 1895. p. 402.....	A9.7:7
notes on. 1891. p. 48.....	A9.7:4
orgyia leucostigma, additional observations on. 1897. p. 15..	A9.6:9
two, of important scale insects. 1894. p. 5 .....	A9.7:7
Parasitism, case of excessive. 1897. p. 62 .....	A9.6:7
Pulvinaria acericola (W. & R.) and P. innumerabilis Rathv. 1898. p. 57 .....	A9.6:17
Pulvinarias, two most abundant, on maple. 1900. p. 7.....	A9.6:22
San Jose scale in 1896-1897 .....	A9.6:12
San Jose scale on dried fruit. 1898. p. 7 .....	A9.6:18
San Jose scale—	
eastern occurrences of. 1894. p. 153 .....	A9.7:7
further notes on. 1895. p. 283 .....	A9.7:7
Scale insect, useful American. 1897. p. 38 .....	A9.6:9
Shade-tree insect problem in eastern U. S. 1895. p. 361 .....	A1.10:895
Shade-tree insects of Springfield and other New England cities. 1895. p. 40 .....	A9.6:2
Shade trees—	
insects which defoliate, in cities and towns, general work against. 1896 .....	A9.5:15
three insect enemies of. 1899 .....	A1.9:99
Smyrna fig culture in United States. 1900. p. 79 .....	A1.10:900
Spider-egg parasites, two—	
1890. pp. 269, 359.....	A9.7:2
1891. p. 202 .....	A9.7:4
Spider parasites, external. 1888. pp. 42, 106 .....	A9.7:1
Spraying, use of steam apparatus for. 1896. p. 69 .....	A1.10:896
Sugar-beet webworm, completed life history of. 1894. p. 369...	A9.7:6
Sugar-cane beetle injuring corn. 1888. p. 11.....	A9.7:1
Tiger swallow-tail, abnormal, report of. 1894. p. 44 .....	A9.7:7
Timothy grass, new enemy to. 1892. p. 90.....	A9.7:5
Tobacco plant, principal insects affecting .....	A1.9:120
same, p. 121 .....	A1.10:898
Yellow-spotted willow slug, report on. 1888. p. 33 .....	A9.7:1
See also, as joint editor of Insect Life .....	A9.7:
See also, for reports as Entomologist, Entomology Division, Agri- culture Department. 1894-1901 .....	A9.1:
See also, as joint author, Riley, Charles Valentine.	
Howard, Leland Ossian, and Marlatt, Charles Lester:	
Carpet beetle or buffalo moth, species injurious to woolen goods, clothing, carpets, upholstery, etc. 1896. p. 58.....	A9.6:4

	<b>Index</b>
	<b>Classification no.</b>
Howard, Leland Ossian, and Marlatt, Charles Lester—Continued	
House flies, centipedes, and other insects that are annoying rather than directly injurious. 1896. p. 43 .....	A9.6:4
Principal household insects of U. S. ....	A9.6:4
San Jose scale—	
its occurrences in United States, full account of its life history, and remedies to be used against it. 1896 .....	A9.6:3
original home of. 1899. p. 36 .....	A9.6:20
Howard, Sanford:	
Ayrshire cattle, characteristics of. p. 193 .....	A1.1:863
Horse, principles of form required to adapt him to special purposes, notices of breeds, etc. p. 335 .....	A1.1:862
Kerry breed of cattle. p. 313 .....	A1.1:862
Howell, A. M.:	
Grape and tomato, fungus diseases of. 1889. p. 49 .....	A6.3:11
Grape vine, diseases of, in South Carolina. 1888. p. 35 .....	A6.3:10
Howell, Arthur H. Skunks of genus Chinchilla, revision of. 1901....	A5.5:20
Howell, Martin A., jr. Canker worm, spring, experience with. 1883. App., p. 82 .....	A8.1:3
Hoyt, John Wesley:	
Agricultural survey of Wyoming. 1893 .....	A27.8:7
London, International Exhibition of 1862, account of. p. 27 .....	A1.1:862
Hubbard, Frederick. Forests and rainfall in West India islands, relation of. 1873. p. 117 .....	A27.9:11
Hubbard, Henry Guernsey:	
Aletia, report on. 1885. App., p. 5 .....	A8.1:4
Ambrosia beetles. 1896. p. 421 .....	A1.10:896
same. 1897. p. 9 .....	A9.6:7
Amphizoa, larva of, notes on. 1892. p. 19 .....	A9.7:5
Bamboo, cultivation of, in U. S., etc. p. 29 .....	A13.3:11
Insect fertilization of an aroid plant. 1895. p. 340 .....	A9.7:7
Insect guests of Florida land tortoise. 1894. p. 302 .....	A9.7:6
Orange, insects affecting, with practical suggestions for their control or extermination. 1885 .....	A9.2:Or1
Orange insects, miscellaneous notes on. 1883. p. 9 .....	A9.3:1
Rust of the orange. p. 361 .....	A1.1:884
Scale insects, experiments on, progress in, etc. p. 152 .....	A1.1:883
same, p. 152 .....	A9.1:883
Scale insects of orange; remedies and their application. p. 106 ..	A9.1:882
Hubbard, Henry Guernsey, and Pergande, Theodore. Coccid, new, on birch. 1898. p. 13 .....	A9.6:18
Hudson Bay region (Keewatin). Biological investigation of (Preble). 1902 .....	A5.5:22
Hudson County, N. J., tornado in, Aug. 24, 1901 (Eadie). p. 355...	A29.6:29
Hughes, Henry A.:	
Sorghum-sugar experiments at Rio Grande, N. J.—	
1887. p. 246 .....	A1.1:887
same, p. 67 .....	A7.3:17
1888. p. 268 .....	A1.1:888
same, with additional matter. p. 29 .....	A7.3:20
Sorghum-sugar manufacture, process for, used at Rio Grande, N. J. 1884. p. 54 .....	A7.3:3
Sugar factories, estimates of cost of. p. 252 .....	A1.1:887
same, p. 73 .....	A7.3:17
Hughes, Oliver J. D. Potato bread for horses in Germany. p. 530.	A4.1:899
Huidekoper, Rush Shippen:	
Hamburg International Exhibition (live stock) of 1883, report on. p. 386 .....	A4.1:884
same. 1884. p. 199 .....	A4.2:An5
Horse, general diseases of. p. 461 .....	A4.2:H78
Hull House. See Chicago, Ill., dietary studies in.	
Hulse, G. W. Beet sugar, manufacture of. 1870. p. 147 .....	A27.9:8
Human body:	
Conservation of energy in, experiments on (Atwater and Rosa). 1899 .....	A10.3:63
Grub supposed to have traveled in. 1890. p. 238 .....	A9.7:2

# Index

Classification no.

## Human body—Continued

- Metabolism of matter and energy in, experiments on (Atwater and others). 1899..... A10.3:69
- same, 1898-1900 (Atwater and others) ..... A10.3:109

*See also* Bladder—Blood—Body material—Bones—Energy.

## Human foods, composition of, etc.:

- 1894. p. 547 ..... A1.10:894
- 1895. p. 573 ..... A1.10:895
- 1897. p. 676 ..... A1.10:897

## Humboldt County, Nevada. Agricultural interest in. 1868. p. 456.

A27.9:6

## Humid climates, irrigation in (King). 1896.....

A1.9:46

## Humidity:

- Atmosphere, charts of, note on (Abbe). 1901. p. 118..... A29.6:29

- Atmospheric, observations on (Lippincott). p. 520..... A1.1:865

- Monthly notes on, Oct., 1894-Oct., 1902..... A29.6:

## Relative—

- inside and outside of buildings (Henry). 1896. p. 456..... A29.6:24

- psychrometric tables for obtaining (Marvin). 1900..... A29.2:P95

- tables for obtaining temperature of. 1897..... A29.2:D51

- San Juan, Porto Rico, report on (Phillips). 1899. p. 319..... A29.1:898

- Vertical gradients of (Frankenfield). 1898..... A29.5:F

*See also* Vapor pressure.

- Humphreys, D. C. Roads, stone and shell. 1894. p. 52..... A22.3:11

## Humus:

- Grandeau's method for determination of, modification of (Huston and McBride). 1893. p. 84..... A7.3:38

- Importance of maintaining a supply of, in soils. 1898. p. 5 .... A1.9:78

- In its relation to soil fertility (Snyder). 1895. p. 131..... A1.10:895

- Hundred years' progress in agriculture (Flint). p. 274 ..... A1.1:872

- Hungarian brome grass, circular on (Scribner). 1894..... A6.4:1

- Same, notice of circular ..... A1.2:H89

- Hungarian grass. 1867. p. 207 ..... A27.9:5

## Hungary:

- Agricultural experiment stations of. 1902. p. 4..... A10.6:13

- Agriculture of, facts relating to. 1867. p. 377 ..... A27.9:5

- Horses of. 1876. p. 120..... A27.9:14

- Milling in, report on (Dewey). 1893. p. 38 ..... A27.9:31

- Viticultural statistics of. 1876. p. 427..... A27.9:14

- Wheat exports of, 1855-68. p. 148..... A27.9:7

- Wool industry in. 1873. p. 191 ..... A27.9:11

*See also* Austria-Hungary.

- Hunt, Caroline L. *See* Atwater, Wilbur Olin, and Bryant, Arthur Peyton.

## Hunt, Ezra M.:

- Animal diseases, contagious. p. 437 ..... A4.1:884

- same. 1884. p. 260 ..... A4.2:An5

- Animal diseases, contagious, extension of, and methods for their limitation. p. 446 ..... A4.1:885

- Anthrax among cattle in New Jersey. p. 359 ..... A1.1:881-2

- Pleuro-pneumonia, contagious, in New Jersey. p. 297 ..... A4.1:884

## Hunt, George E.:

- Atmospheric pressure, high and low, monthly notes on, May, 1900, June-Aug., 1901, Jan.-Oct., 1902..... A29.6:

- River and flood service, monthly notes on, June, 1902..... A29.6:30

## Rivers and floods—

- monthly notes on. Apr., 1901. p. 146 ..... A29.6:29

- notes on. May, 1900. p. 195 ..... A29.6:28

## Hunt, Thomas F.:

- Agriculture, methods of instruction in teaching. 1896. p. 35.... A10.3:30

- Plats, equalizing irregularities of, caused by defective germination. 1891. p. 111 ..... A10.5:3

## Hunter, Walter D.:

- Cicada, periodical, in 1902, circular on. 1902..... A9.5:44

- Locusts, destructive, in 1897. p. 40..... A9.6:10

- Melanoplus spretus, investigation to determine whether, breeds permanently in Turtle Mountains, in North Dakota. 1900. p. 30 ..... A9.6:22

**Classification no.**

363



# Index

Classification no.

Hybrid offspring, quantitative studies on transmission of parental characters to (Spillman). 1902. p. 88.....	A10.3:115
Hybridizing:	
Cultivation and, of wheat (Watts). 1872. p. 432 .....	A27.9:10
Improvement of grape by (Campbell). p. 209.....	A1.1:862
<i>See also</i> Evans, Walter H.	
Hybrids and their utilization in plant breeding (Swingle and Webber). 1897. p. 383 .....	A1.10:897
Hyde, Gustavus A., notes on (Abbe). 1901. p. 220.....	A29.6:29
Hyde, John:	
Agricultural statistics of Eleventh U. S. Census, discussion of. p. 12 .....	A4.3:11
Fertilizer industry, production and consumption, review of statistics of, with abstracts of State laws for analysis of sale. 1898..	A27.8:13
Flax and hemp, extracts from Eleventh Census bulletin on. 1892. p. 83.....	A11.5:4
Statistics Division, Agriculture Department, work of, for farmer. 1897. p. 258.....	A1.10:897
same, reprinted with title "Of what service are statistics to the farmer?" .....	A27.8:14
<i>See also</i> , for reports as Statistician, Agriculture Department, 1897-1902 .....	A27.1:
Hydrocyanic-acid gas:	
As an insecticide (Coquillett). 1893. p. 176 .....	A9.7:6
Experiments with, as means of exterminating mealy bugs and other insect pests in greenhouses (Hemenway). 1900. p. 69.	A9.6:22
Fumigating greenhouses and cold frames, use of (Woods and Dorsett) .....	A9.5:37
Low-growing plants, as an insecticide on (Sanderson and Penny). 1900. p. 60 .....	A9.6:26
New method for handling, in orchards; Emory fumigator (Johnson). 1899. p. 43 .....	A9.6:20
Notes on (Lounsbury and Mally). 1902. p. 75 .....	A9.6:31
Process of, patent on, declared invalid (Coquillett). 1894. p. 257 .....	A9.7:7
Remedy for San Jose scale and other insects (Johnson). 1898. p. 39 .....	A9.6:17
Results with, for destruction of insects in large buildings (Johnson). 1901. p. 166.....	A10.3:99
Treatment for scale insects, history of (Coquillett). 1891. p. 457.	A9.7:3
Use of—	
against household insects (Howard). 1902 .....	A9.5:46
for destruction of red scale (Coquillett). 1890. p. 202.....	A9.7:2
for exterminating household insects (Beattie). 1902. p. 80..	A9.6:31
Hydrodynamic equations for atmosphere, note on (Abbe). 1897. p. 445 .....	A29.6:25
Hydrodynamics, equations of, in form suitable for application to problems connected with movements of earth's atmosphere (Cottier). 1897. p. 296 .....	A29.6:25
Hydrographic Office, U. S., voluntary meteorological observers of, instructions to (Abbe). 1901. p. 314 .....	A29.6:29
<i>See also</i> Marine Meteorology Division.	
Hydrography of southern Appalachians (Pressey and Myers). p. 123.	A1.2:Ap4 <sup>3</sup>
Hydrological congress. <i>See</i> Clermont-Ferrand, France.	
Hydrology and stratigraphy of Nevada (Hicks). 1890. p. 71.....	A15.2:Ar7
Hydrology of Lake Minnetonka watershed (Cooley). 1899. p. 14..	A29.6:27
Hygiene and demography congress, 1900. <i>See</i> Paris, tenth international congress of hygiene and demography.	
Hygrometer, crude (Abbe). 1898. p. 567 .....	A29.6:26
Hygrometric observations, utility of (Pennell). 1899. p. 162 .....	A29.3:24
Same (Hazen). 1899. p. 164 .....	A29.3:24
Hylesinus sericeus, notes on (Schwarz). 1894. p. 254.....	A9.7:7
Hymenomycetes, spores of, method for preserving (Harz). 1889. p. 163 .....	A28.5:5
Hymenomycetous fungi, some new species of (Ellis and Everhart). 1889. p. 24 .....	A28.5:5



<b>Hymenoptera:</b>	
Bred parasitic, in the national collection, some of—	
1890. v. 2. p. 348 .....	A9.7:2
1890. v. 3. p. 15, 57, 151, 460 .....	A9.7:3
1891. v. 4. p. 122 .....	A9.7:4
Parasitic, host relations of (Howard). 1891. p. 277 .....	A9.7:3
<i>See also</i> Nematinae — Typhlocyba.	
<b>Hymenopterous parasites:</b>	
Of California red scale (Howard). 1894. p. 227 .....	A9.7:6
Of Coleoptera, observations on some (Chittenden). 1893. p. 247. ....	A9.7:5
<i>See also</i> Aphelininae.	
<b>Hyperaspis signata</b> , beneficial work of (abstract) (Howard). 1900. p. 17 .....	A9.6:26
<b>Hyphomycetous fungi.</b> <i>See</i> Fungi.	
<b>Hypoderas columbæ</b> , note on (Kellicott). 1892. p. 77 .....	A9.7:5
<b>Hypoderma bovis</b> , larvæ of (Curtice). 1890. p. 207 .....	A9.7:2
<b>Hypoxylon</b> , North American species of, synopsis of (Ellis and Everhart). 1889. p. 19 .....	A28.5:5
<b>Iberia Parish, La.</b> Soils and production of (Rapley). 1884. p. 34. ....	A1.8:35
<b>Ice:</b>	
Anchor, note on (Abbe.) 1897. p. 212 .....	A29.6:25
Breaking up of, at Pierre, S. Dak., notes on, 1846-89 (Abbe). p. 109 .....	A29.6:27
Crop of, from meteorological point of view (Abbe). 1895. p. 13. ....	A29.6:23
Drift, and theory of ocean currents (Daly). 1900. p. 433 .....	A29.6:28
Jam in Niagara River, note on (Abbe). 1899. p. 61 .....	A29.6:27
Kennebec River, report of (Abbe). 1897. p. 98 .....	A29.6:25
Lake, sudden disappearance of, note on (Abbe). 1900. p. 114. ....	A29.6:28
same (Ten Broeck). 1900. p. 287 .....	A29.6:28
Measurements of, notes on (Volker). 1899. p. 142 .....	A29.3:24
Vapor pressure for, note on (Abbe). 1899. p. 476 .....	A29.6:27
Ice and snow bulletins .....	A29.16:
<b>Ice caves:</b>	
As meteorological phenomena (Kimball). 1901. p. 366 .....	A29.6:29
Flagstaff, Ariz. (Renoe). 1901. p. 54 .....	A29.6:29
Freezing wells and, notes on (Kimball). 1901. p. 509 .....	A29.6:29
Notes on (Abbe). 1901. p. 71 .....	A29.6:29
<b>Ice columns</b> , publications on (Abbe). 1898. p. 217 .....	A29.6:26
<b>Ice storm</b> , note on (Abbe). 1900. p. 154 .....	A29.6:28
<b>Ice trade:</b>	
History of (Wetherell). p. 439 .....	A1.1:863
Weather Bureau and, note on (Abbe). 1899. p. 63 .....	A29.6:27
<b>Iceland</b> , meteorological reports by cable from, notes on (Abbe). 1899. p. 103 .....	A29.6:27
<b>Icerya:</b>	
Its probable origin the islands of Bourbon and Mauritius (Riley). 1887. p. 27 .....	A9.3:15
Notes on. 1891. p. 439 .....	A9.7:3
Parasite, new, report of (Howard). 1892. p. 378 .....	A9.7:4
Some new, report on. 1890. p. 92 .....	A9.7:3
Three new parasites of (Howard). 1889. p. 268 .....	A9.7:1
<i>See also</i> Scale insects.	
<b>Icerya purchasi:</b>	
Australian parasite of (Williston). 1888. p. 21 .....	A9.7:1
Letter on. 1889. p. 15 .....	A9.7:2
New Zealand (Wight). 1893. p. 194 .....	A9.7:6
Work against in Portugal, with account of introduction from America of <i>Novius cardinalis</i> (Howard). 1898. p. 30 .....	A9.6:18
<b>Idaho:</b>	
Agriculture in (Whitson). 1869. p. 369 .....	A27.9:7
Canals in, distribution of water from (Ross). 1902. p. 199 .....	A10.3:119
Climate of, some features of (Blandford). 1901. p. 19 .....	A29.6:29
Cricket, western, and certain locusts in, outbreaks of (Milliken) ..	A9.7:6
Forest condition of Rocky Mountains in (Ensign). p. 41 .....	A13.3:2
Grasshoppers in, outbreak of (Bruner). 1890. p. 135 .....	A9.7:3
Hog cholera and enzootic cerebro-spinal meningitis among horses in (Williams). 1898. p. 179 .....	A4.1:897

# Index

	Classification no.
<b>Idaho—Continued</b>	
Investigation of codling moth in, 1900 (Simpson). p. 51 .....	A9.6:30
Irrigation in, in 1890 (Nimmo). p. 149 .....	A15.2:P94 <sup>1</sup>
North, insects of, notes on (Aldrich). 1894. p. 201 .....	A9.7:7
Northern, plants in, collection of, made by J. H. Sandberg and assistants in 1892, report on (Holzinger). 1895. p. 205 .....	A6.5:3
Rainfall and rivers in, notes on (Abbe). 1898. p. 473 .....	A29.6:27
South central, biological reconnaissance of, results of (Merriam). 1891 .....	A5.5:5
Thunderstorm of May 16, 1900, in, notes on (Abbe). p. 207 .....	A29.6:28
Water in, duty of (Ross). 1902. p. 221 .....	A10.3:104
Water supply of, for season of 1900 as depending on snowfall (Blandford). p. 494 .....	A29.6:28
Weather forecasts for 1895-99, notes on (Abbe). p. 313 .....	A29.6:27
<i>See also</i> Boise Valley — Cœur d'Alene Mountains — Pacific Northwest.	
Idaho pea. <i>See</i> Gram.	
Ignis fatuus or Jack-o-lantern (Abbe). 1897. p. 211 .....	A29.6:25
Ihne, Egon. Phenologic or thermal constants. 1895. p. 427 .....	A29.3:11 <sup>2</sup>
Ilex cassine, aboriginal North American tea, its history, distribution, and use among native North American Indians (Hale). 1891. <i>See also</i> Yaupon.	A6.3:14
<b>Illinois:</b>	
Cattle trade and dairy interest of (Perry). p. 335 .....	A4.1:885
Crops in (Osborn). 1891. p. 483 .....	A27.9:29
Farm resources and products of. 1868. p. 257 .....	A27.9:6
Farmers' institute work accomplished in (Coolidge). 1902. p. 20 .....	A10.3:120
Horses in, diseases among (Detmers). p. 355 .....	A1.1:881-2
Northern, dairy husbandry in. 1874. p. 159 .....	A27.9:12
Nursery inspection and orchard insecticide work in (Forbes). 1901. p. 172 .....	A10.3:99
Oats and corn in, cost of growing. 1873. p. 36 .....	A27.9:11
Road improvement in, address on (Stone). 1897 .....	A22.4:28
Swine plague in (Detmers). 1880. p. 13 .....	A1.6:22
<i>See also</i> Cairo — Champaign — Cook County — Ottawa.	
<b>Illinois, University of:</b>	
College of Agriculture, building for. 1901. p. 604 .....	A10.6:12
Dietary studies at (Grindley and Sammis). 1901. p. 7 .....	A10.3:91
Illinois Farmers' Institute, letter to, on road improvement (Stone). 1897. p. 23 .....	A22.4:28
Illinois State Agricultural Society fair, Decatur, Sept., 1870 (Capron) p. 420 .....	A27.9:8
<b>Illustrations Division, Agriculture Department, report of (Marx):</b>	
1890. p. 435 .....	A1.1:890
1891. p. 485 .....	A1.1:891
1892. p. 495 .....	A1.1:892
1893. p. 393 .....	A1.1:893
Imbibition of rocks (Hill). 1891. p. 213 .....	A15.2:P94 <sup>1</sup>
<b>Immigration statistics:</b>	
1864, Jan.-June; No. 4, p. 8; July-Sept., No. 5, p. 37 .....	A27.9:2
1864, Oct.-Dec. No. 1. p. 40 .....	A27.9:3
1867, July-Sept. p. 370 .....	A27.9:5
1820-1870. p. 482 .....	A27.9:8
1872 and 1873. p. 60 .....	A27.9:12
Imperial, Cal., soil survey around (Means and Holmes). 1902 .....	A26.4:9
Same (Means and Holmes). p. 587 .....	A26.5:901 <sup>1</sup>
Imperial German meat inspection law. 1901 .....	A4.4:32
Imphee and sorghum culture (Smith). p. 129 .....	A1.1:862
Implements. <i>See</i> Agriculture implements.	
Import duties, foreign, on wheat. 1893. p. 248 .....	A27.9:31
Imports and exports, agricultural, reports on, 1893-1899 .....	A12.4
<i>See also</i> Agricultural imports — Names of countries.	
Incubators. <i>See</i> Chinese incubators.	
Indexes of Agriculture Department. <i>See</i> Agriculture Department, indexes and lists.	

# Index

Classification no.

## India:

Agricultural statistics of. 1895. p. 448 .....	A27.9:13
Agriculture in, account of (Siva). 1874. p. 389.....	A27.9:12
Cinchona cultivation in. 1870. p. 285.....	A27.9:8
Cold weather storms of (Abbe). 1894. p. 295.....	A29.6:21
Cotton crop of—	
1892. p. 280 .....	A27.9:30
1892-93. p. 167 .....	A27.9:31
1893-94. p. 203 .....	A27.9:32
1894. p. 24 .....	A27.9:33
1894-95. p. 146 .....	A27.9:33
Cotton season of 1869-70 in. p. 361.....	A27.9:8
Cyclical changes in, preliminary discussion (Dallas). 1897. p. 532.	A29.6:25
Droughts, famines, and forecasts in (Archibald). 1900. p. 246..	A29.6:28
Droughts and famines in (Eliot). 1895. p. 444 .....	A29.3:11 <sup>2</sup>
Droughts in, prediction of (Dallas). 1894. p. 13.....	A29.3:11 <sup>1</sup>
Irrigation in. 1873. p. 604 .....	A27.9:11
Jute in United States and. p. 294 .....	A1.1:874
Labor in United States and, distribution of. 1887. p. 366.....	A27.9:25
Meteorological work in, history of (Kimball). 1902. p. 31 .....	A29.6:30
Rice crop of, 1894. p. 147 .....	A27.9:33
Seasonal forecasts in, notes on (Abbe). 1898. p. 266.....	A29.6:26
Sugar-cane in, cultivation of, 1875. p. 135.....	A27.9:13
Wheat competition. 1887. p. 586.....	A27.9:25
Wheat crop in—	
1884. No. 11 .....	A27.9:22
1884-85. No. 21. p. 39 .....	A27.9:23
1886-87. p. 386.....	A27.9:25
1887-88. p. 420.....	A27.9:26
1888-89. p. 320.....	A27.9:27
1889-90. p. 419.....	A27.9:28
1884-90. p. 299.....	A27.9:28
1890-91. p. 411.....	A27.9:29
1891-92. p. 355.....	A27.9:30
1892-93. p. 308.....	A27.9:31
1893-94. p. 423.....	A27.9:32
Wheat culture in (Hauser). p. 569.....	A1.1:885
Wheat production and exportation in, course of, 1880-1896 .....	A12.4:10
<i>See also</i> Bengal — Burma — Calcutta — Madras — Punjab.	
Indian agricultural exhibition. 1868. p. 406 .....	A27.9:6
Indian corn. <i>See</i> Maize.	
Indian mallow. <i>See</i> <i>Abutilon avicennæ</i> .	
Indian monsoons and Nile floods, notes on (Abbe). 1900. p. 252..	A29.6:28
"Indian summer," note on (Matthews). 1902. pp. 19, 69.....	A29.6:30
Same (Wilson). 1902. p. 440 .....	A29.6:30
Indian Territory:	
Artesian and underground waters in, west of 97th meridian (Hill).	
1893. pt. 3, p. 41 .....	A15.2:Ir7 <sup>2</sup>
Cattle in, report on (Shaw). 1885. No. 20. p. 27.....	A27.9:23
Frosts in, dates of first killing (Abbe). p. 328 .....	A29.6:22
Plants collected in, by C. S. Sheldon and M. A. Carleton in 1891	
(Holzinger). 1892. p. 189 .....	A6.5:1
Indiana:	
Cattle trade and dairy interests of (Perry). p. 335 .....	A4.1:885
Corn-root web-worm an old pest in, note on. 1886. p. 33 .....	A9.3:12
Crops in (Osborn). 1891. p. 483 .....	A27.9:29
Farm resources and products of. 1868. p. 255 .....	A27.9:6
Farmers' institute work accomplished in (Latta). 1902. p. 21 ..	A10.3:120
Forestry for certain portions of (Furnas). 1884. p. 346 .....	A13.5:4
Fruit growing in. 1873. p. 356.....	A27.9:11
Hog cholera and swine plague in (Bitting). p. 199.....	A4.1:897
Larvæ of crane-fly destroying young wheat in (Webster). 1890.	
p. 12 .....	A9.7:3
Northern, mineral matter deposited with snow in. 1892. (Goss).	
p. 20 .....	A29.6:20
Road improvement in, extract from governor's message (Mount).	
p. 3.....	A22.4:33

## Indiana—Continued

- Southeastern, pericdical cicada in. 1886. p. 24 ..... A9.3:12  
 Strawberry-leaf flea beetle in (Webster). 1891. p. 137 ..... A9.7:3  
 Swine-plague in (Voyles). 1879. p. 112 ..... A1.6:12  
 Swine-plague in, investigation of (Voyles). p. 421 ..... A1.1:878  
*See also* Purdue University.
- Indians, North American:  
 Food products of. p. 404 ..... A1.1:870  
 Ilex cassine among (Hale). 1891 ..... A6.3:14  
*See also* Klamath Indians—Mendocino County, Calif.
- Indigo plant, cultivation of, in U. S. p. 255 ..... A1.1:873
- Indo-China, French, meteorology in, notes on (Abbe). 1901. p. 263 ..... A29.6:29  
 ..... A27.9:863
- Industrial classes, education of (Andrew). 1864. No. 1. p. 15....
- Industrial colleges:  
 Buildings for, general plan, with necessary aids to instruction in each department of education (Owen). 1864 ..... A27.2:In2  
 Historical sketch. p. 317 ..... A1.1:867  
 same, additional. p. 540 ..... A1.1:868  
 Nature of education, etc. (Bollman). 1864 ..... A27.2:In2
- Industrial development, relation of good roads to (Hays). 1902. p. 78 ..... A22.3:23
- Industrial education:  
 Paper on (Willits). 1885. p. 55 ..... A1.7:9  
 same (McWhirter). 1885. p. 105 ..... A1.7:9  
 Progress of—  
 1869. p. 452 ..... A1.1:869  
 1870. p. 467 ..... A1.1:870  
 1871. p. 306 ..... A1.1:871  
 1872. p. 348 ..... A1.1:872  
 1873. p. 321 ..... A1.1:873  
 1874. p. 312 ..... A1.1:874  
 1875. p. 469 ..... A1.1:875  
 1876. p. 326 ..... A1.1:876  
*See also* Agricultural education.
- Industrial expositions. 1872. p. 288 ..... A27.9:10
- Industrial population, relation of farmers' institute to (Hoard). 1902. p. 20 ..... A10.3:110
- Industrials [or manual training], practical importance of (Gilkison). 1900. p. 96 ..... A10.3:76
- Industries and arts, true relations of science to (Wiley). p. 32 ..... A1.7:2
- Industry:  
 Profits of. 1865. No. 2. p. 15 ..... A27.9:3  
 Southern, notes on. 1866. p. 412 ..... A27.9:4  
 same. 1867. p. 371 ..... A27.9:5  
 Vs. speculation. 1892. p. 134 ..... A27.9:30  
*See also* Trade.
- Infant and invalid foods, analysis of, provisional method for (Wiley). 1902. p. 41 ..... A7.3:65
- Infantado sheep. p. 354 ..... A1.1:866
- Infectious diseases. *See* Diseases of animals and references thereunder.
- Influenza in horses (Law). p. 203 ..... A1.1:872
- Information and Exchange Bureau, Agriculture Department, creation of, address favoring (Woodhull). 1885. p. 90 ..... A1.7:9
- Ingersoll, C. L.:  
 Agricultural experiment stations bulletin, present and prospective. 1893. p. 138 ..... A10.3:16  
 Field experiments, cooperative, report on. 1891. p. 109 ..... A10.5:3
- Inoculation:  
 As a preventive of swine diseases. p. 58 ..... A1.1:889  
 same. p. 16 ..... A4.1:889-90  
 For prevention of hog cholera, experiments with (Salmon). 1892. A1.9:8  
 For rinderpest. 1872. p. 149 ..... A27.9:10
- Insect borer of apple twigs (Glover). 1873. p. 29 ..... A27.9:11
- Insect borers, few, notes on (Davis). 1891. p. 64 ..... A9.7:4
- Insect food of crow (Schwarz). 1895. p. 57 ..... A5.3:6

	Index
	Classification no.
Insect collection of a large museum, suggestions for (Riley). 1890. p. 342.....	A9.7:2
Insect life, devoted to the economy and life habits of insects, especially in their relation to agriculture; edited by C. V. Riley and L. O. Howard. vols. 1-7. Index. 1888-1895 .....	A9.7:
See also Murtfeldt, Mary E.	
Insect pests:	
Action taken regarding, in California. 1892. p. 158.....	A1.8:20
Danger of importing (Howard). 1897. p. 529 .....	A1.10:897
Four imported, notes on (Kirkland). 1902. p. 93 .....	A9.6:31
Household—	
bedbugs and red ants (Riley). 1889. p. 104.....	A9.7:2
carpet beetle, or so-called buffalo moth (Riley). 1889. p. 127 .....	A9.7:2
cockroaches (Riley). 1890. p. 266 .....	A9.7:2
true clothes moths (Riley). 1890. p. 211 .....	A9.7:2
Hydrocyanic-acid gas as a means of exterminating (Hemenway). 1900. p. 69 .....	A9.6:22
Plant diseases and, proceedings of national convention for suppression of (Galloway). 1897 .....	A1.8:57
Spraying fruits for. 1892 .....	A1.9:7
Trinidad, British West Indies, notes on some (Urich). 1893. p. 196.....	A9.7:6
Insect powder. See Buhach.	
Insect vivaria, how are [they] to be lighted? (Swinton). 1890. p. 18.	A9.7:3
Insectary and office methods in use in entomological department of Ohio Agricultural Experiment Station, report on (Webster). 1899. p. 46 .....	A9.6:20
Insecticide appliances, report on (Riley). 1889. p. 243, 263 .....	A9.7:1
Insecticide soaps, report on (Marlatt). 1896. p. 38 .....	A9.6:6
Insecticides:	
Arsenical, soluble arsenic in (Haywood). 1902. p. 51 .....	A9.6:37
Arsenites and arsenical mixtures as (Gillette). 1893. p. 115....	A9.7:6
Carbon bisulphide as an (Smith). 1894. p. 108.....	A9.7:7
same (Hinds). 1902.....	A1.9:145
Crude petroleum as (Wilcox). 1900. p. 15.....	A1.9:114
Early spring applications of, on fruit trees, some effects of (Felt). 1900. p. 22 .....	A9.6:26
Experiments at Ames, Iowa (Osborne). 1886. p. 23.....	A9.3:11
Experiments at Trenton, N. J. (Bennett). 1886. p. 27 .....	A9.3:11
Experiments with, some (Marlatt). p. 33 .....	A9.6:20
same. 1886 .....	A9.3:11
Farm practice and fertilizers as (Smith). 1893. p. 93.....	A9.7:6
Fertilizers as (Smith). 1891. p. 217 .....	A9.7:3
Formulas for (Marlatt). 1894. p. 572.....	A1.10:894
same. 1895. p. 580.....	A1.10:895
Hydrocyanic acid gas as (Coquillett). 1893. p. 176 .....	A9.7:6
same, on low-growing plants (Sanderson and Penny). 1900. p. 60.....	A9.6:26
Important—	
condensed information concerning, May, 1891 .....	A9.5:1
directions for preparation and use (Marlatt) .....	A1.9:19
same, revised. 1901 .....	A1.9:127
Methods of analysis for. 1902. p. 97.....	A7.3:67
Naphthaline as (Taylor). 1883.....	A18.2:N16
New and old, and their combination with fungicides, some observations on (Galloway). 1894. p. 126 .....	A9.7:7
New, report on (Kirkland). 1896. p. 27.....	A9.6:6
Notes on (Marlatt)—	
1894. p. 115 .....	A9.7:7
1895. p. 19 .....	A9.6:2
1897. p. 54 .....	A9.6:9
1898. p. 94 .....	A9.6:17
Preparation and use of—	
1896. p. 619 .....	A1.10:896
1897. p. 637 .....	A1.10:897
1898. p. 659 .....	A1.10:898

# Index

Classification no.

## Insecticides—Continued

- Tests with, upon garden insects (Alwood). 1887. p. 38 ..... A9.3:13  
 Use of, practical notes on (Beckwith). 1891. p. 269 ..... A9.7:3  
*See also* Arsenical insecticides—Fungicides and insecticides—Hydrocyanic-acid gas—Kerosene—Kerosene emulsion—Naphthaline—Oil emulsions—Orchard insecticide work in Illinois—Paris green—Petroleum—Pyrethrum—Spray machinery.

## Insects:

- Acorn, primary and secondary (Murtfeldt). 1894. p. 318..... A9.7:6  
 Animals, domestic, insects affecting (Osborn). 1896..... A9.6:5  
 Asparagus (Chittenden). 1898. p. 54..... A9.6:10  
 Beans and peas, insects injurious to (Chittenden). 1898. p. 233. A1.10:898  
 Carriers and spreaders of disease (Howard). 1901. p. 177..... A1.10:901  
 Collection of, small, made during Death Valley expedition, report of (Riley). 1893. p. 235..... A5.5:7  
 Collections of, how shall we improve? (Gillette). 1895. p. 95... A9.6:2  
 Contagious diseases, use of, in contending with (Osborn). 1890, p. 141..... A9.7:3  
 Corn, observations on, in 1887 (Webster). p. 147..... A1.1:887  
     same, 1890 (Webster). p. 159..... A9.7:3  
 Cranberry, insects affecting (Smith). p. 393 ..... A1.1:884  
 Destruction of, recent inventions for (Breed). p. 323 ..... A1.1:876  
     *See also* Insecticides.  
 Dipterous, two, injurious to cultivated flowers (Coquillett). 1895. p. 399..... A9.7:7  
 Drugs injured by, at University of Kansas (Kellogg). 1894. p. 31. A9.7:7  
 Economic, of season, special (Davis). 1894. p. 198..... A9.7:7  
     same (Johnson). 1900. p. 80 ..... A9.6:26  
 Enemies of agriculture, conflict of Russian *zyemstovs* with (Morachevski). 1902. p. 61..... A9.6:38  
 Farm observations in West Virginia on, some notes on (Hopkins). 1896. p. 71..... A9.6:6  
 Fertilization of an aroid plant by (Hubbard). 1895. p. 340..... A9.7:7  
 Fertilization of muskmelons by, notes on (Rane). 1898. p. 75... A9.6:17  
 Foreign, desirability of an inspection system against (Howard). 1897. p. 11..... A1.8:57  
 Garden crop (Chittenden). 1899..... A9.6:19  
     same (Chittenden). 1900 ..... A9.6:23  
     same, in Florida (Ashmead). 1887. p. 9 ..... A9.3:14  
 Hemipterous, record of some experiments relating to effect of punctures of some, upon shrubs, fruit, and grains, 1886 (Webster). 1887. p. 54 ..... A9.3:13  
 Hop plant, insects affecting (Smith). p. 393 ..... A1.1:884  
     same (Howard). 1897. p. 40 ..... A9.6:7  
 How they affect health in rural district (Howard). 1902..... A1.9:155  
 Idaho, north, notes on (Aldrich). 1894. p. 201..... A9.7:7  
 Importation and repression of, destructive (Webster). 1895. p. 79 ..... A9.6:2  
 Injuries from. *See* Crops.  
 Injurious—  
     commerce and (Howard). 1895. p. 332..... A9.7:7  
     early published references to some of our (Webster). 1892. p. 262 ..... A9.7:4  
     hibernation of, temperature experiments as affecting received ideas on (Howard). 1897. p. 18..... A9.6:9  
     irrigation and (Howard). 1890. p. 215 ..... A9.7:2  
     laws, recent, against, with laws relative to foul brood in North America (Howard). 1898..... A9.6:13  
     legislation against, compilation of laws and regulations in U. S. and British Columbia (Howard). 1895..... A9.3:33  
     list of principal—  
         1899. p. 745 ..... A1.10:899  
         1900. p. 725 ..... A1.10:900  
         1901 (Chittenden). p. 674 ..... A1.10:901  
     methods of controlling, with formulas for insecticides—  
         1894 (Marlatt). p. 572..... A1.10:894



**Insects—Continued**

**Injurious—Continued**

methods of controlling, etc.—Continued

1895. p. 580 .....	A1.10:895
1897. p. 635 .....	A1.10:897
1898. p. 657 .....	A1.10:898
methods of studying life histories of, notes on (Howard).	
1893. p. 82 .....	A9.7:6
new, of year (Riley). 1892. p. 16 .....	A9.7:5
note on. 1863. No. 3. p. 14 .....	A27.9:1
some of our, early published references to (Webster). 1892.	
p. 323 .....	A9.7:4
<i>See also</i> Packard, Alpheus Spring.	
Laissez-faire philosophy applied to insect problem (Marlatt).	
1899. p. 5 .....	A9.6:20
Lantern trap for, successful (Gillette). 1897. p. 75 .....	A9.6:9
Little-known, of economic importance, notes on some (Johnson).	
1897. p. 83 .....	A9.6:9
Millet, insect injury to (Chittenden). 1898. p. 84 .....	A9.6:17
Miscellaneous extracts from correspondence of Entomology Division relative to. 1883 .....	A9.3:2
same. 1884 .....	A9.3:4
Miscellaneous report on (Comstock). p. 195 .....	A1.1:881-2
same, p. 195 .....	A9.1:882
North American, enumeration of published synopses, catalogues, and lists of, etc. 1888 .....	A9.3:19
Notes on. 1866. pp. 287, 343, 388 .....	A27.9:4
same. 1891 (Ormerod). p. 36 .....	A9.7:4
Nursery stock, principal insects liable to be distributed on (Banks). 1902 .....	A9.6:34
Orange and other plants of citrus family, with practical suggestions for their control or extermination (Hubbard). 1885 .....	A9.2:Or1
<b>Parasitic—</b>	
report on predaceous and, in applied entomology (Riley).	
1893. p. 130 .....	A9.7:6
studies of predaceous and, in New Zealand, Australia, and adjacent islands (Koebele). 1893 .....	A1.8:51
Petroleum, crude, and its effects upon, notes on (Smith). 1901. p. 176 .....	A10.3:99
Pine in Black Hills Forest Reserve, insect enemies of (Hopkins). 1902 .....	A9.6:32
Pine tree, observations on certain (Felt). 1902. p. 103 .....	A9.6:37
Plants and, some interrelations of (Riley). 1892. p. 358 .....	A9.7:4
<b>Predaceous—</b>	
economic value of (Smith). 1893. p. 142 .....	A9.7:6
report on parasitic and, in applied entomology (Riley). 1893. p. 130 .....	A9.7:6
studies of parasitic and, in New Zealand, Australia, and adjacent islands (Koebele). 1893 .....	A1.8:51
<b>Predatory—</b>	
important, report of. 1893. p. 6 .....	A9.7:6
which affect usefulness of scale-feeding coccinellidæ (Marlatt). 1902. p. 84 .....	A9.6:37
Rose, violet, and other ornamental plants, some insects injurious to (Chittenden). 1901 .....	A9.6:27
Senses of, report of (Riley). 1894. p. 33 .....	A9.7:7
Shade tree. <i>See</i> Shade-tree insects.	
Spruce in Northeast, insect enemies of (Hopkins). 1901 .....	A9.6:28
Systematic position of Orthoptera in relation to other orders of. 1883. p. 286 .....	A8.1:3
Tobacco plant, report on (Howard) .....	A1.9:120
same, p. 121 .....	A1.10:898
Vegetable crops, insects injurious to (Chittenden). 1902 .....	A9.6:33
Vegetable products, stored, some little-known insects affecting (Chittenden). 1897 .....	A9.6:8
Vegetation, general observations on those destructive to (Neal). 1883. p. 35 .....	A9.3:1

# Index

Classification no.

## Insects—Continued

Vernacular names of (Gillette). 1897. p. 32.....	A9.6:9
same (Doran). 1898.....	A9.6:17
Violet, rose, and other ornamental plants, some insects injurious to (Chittenden). 1901.....	A9.6:27
Weather and, observations during season of 1899 (Chittenden). 1900. p. 51.....	A9.6:22
same, 1900 (Chittenden). p. 63.....	A9.6:30
Wheat, fall, insects affecting (Webster). p. 383.....	A1.1:884
same, p. 311.....	A1.1:885
Wheat, growing, insect enemies of (Marlatt). 1901.....	A1.9:132
White pine, insect enemies of (Chittenden). 1899. p. 55.....	A13.3:22
<i>See also</i> Agromyzidæ — Anarsia lineatella — Anthomyia — Aphe- lenchus olesistus — Aphididæ — Aphis — Apple-tree borers — Apple-tree weevil — Apple-twigg insect borer — Aquatic bug — Argyresthia — Arkansas — Army worm — Asiatic ladybird — Asopia costalis (clover hay worm) — Australia — Australian lady- bird — Australian lamellicorns — Axima — Bahamas — Bean weevil — Bees — Beet insects — Beet leaf pegomyia — Beetle — Belvosia — Bibio albipennis — Blackberry borers — Blastophaga psenes — Blood louse — Boll worm — Bot — Box-elder plant- bug — Braconidæ — Brazil — Bronze apple-tree weevil — Bru- chus — Bryobia — Bucculatrix canadensisella — Buffalo gnats — Buffalo tree-hopper — Butterfly — Cabbage worm — Cacoecia cerasivorana — California — Canada — Canker-worms — Cater- pillar — Cattle tick — Cecidomyiids — Cecidomyiid — Centi- pede — Cereals — Changa — Chestnut borer — Chicago Worlds' Columbian Exposition — Chicken tick — Chilo saccharalis — Chinch bug — Chionobas macounii — Chrysalis — Cicada — Cim- bex — Clisiocampa Americana — Clover-mite — Clover-seed caterpillar — Clover-seed midge — Cockroaches — Cocoanut mealy-wing — Colaspis flava — Coleoptera — Colorado — Cone-nose — Corn bill bugs — Corn crambid — Corn-feeding syphus-fly — Corn-root aphid — Corn-root web-worm — Corn stalk-borer — Cossidæ — Cotton army worm — Cotton caterpil- lars — Cotton cutworm — Cotton insects — Cotton or melon plant-louse — Cotton worm — Cottontail bot — Cotton stainer — Cottonwood borer — Cranberry fireworm — Cranberry gall fun- gus — Cranberry girdler — Cranberry leaf-galls — Crane-fly — Crickets — Cryptophasa unipunctata — Curculio — Currant stem girdler — Cut-worm — Cypress twig borer — Cyrtoneura — Delaware — Dendrotettix — Dermestes vulpinus — Digger- wasp — Diptera — Dipterous insect — Dipterous leaf-miners — Dogwood saw-fly — Elm insect — Encyrtid — Entilia sinuata — Erysiphæ — Eumænsatala — Europe — Eustrotia caduca — Fall army worm — Fleas — Flies — Florida — Fluke-worms — Flukes and tapeworms of cattle — Forest trees — Forests — Fruit-worm — Gall makers — Garden insects — Garden pest — Georgia — Good Hope, Cape of — Grain — Grain louse — Grain plant louse — Grain toxoptera — Grape — Grapevine hopper — Grass insects — Grasshoppers — Grasses — Green clover worm — Green pea louse — Guava mealy wing — Hairy cat- erpillars — Harlequin cabbage bug — Hemipterous insects — Hen flea — House ants — House centipede — Household in- sects — Hydrocyanic acid gas — Hymenoptera — Insect borers — Insect life — Insect pests — Insect vivaria — Insec- ticides — Iowa — Japanese insects — Japanese peach fruit- worm — Kidney worm of swine — Kissing-bug — Larvæ — Lepidopterous insect — Lestophonus — Library pest — Ligni- vorous insect — Locusts — Lucilia nobilis — Lysiphlebus — Maryland — Massachusetts — Mealy bugs — Mealy-wing — Mediterranean flour moth — Membracidæ (tree hoppers) — Mexico — Michigan — Mississippi — Missouri — Mite — Mole cricket — Monephora bicincta — Monomorium pharaonis — Morelos orange fruit-worm — Mosquito — Moths — Myrio- pods — Nebraska — Nematode leaf disease — New Jersey — New Mexico — New York State — New Zealand — New	

**Insects—Continued**

Zealand katipo—Norway and Sweden—Ohio—Orange— Orthezia insignis—Orthoptera—Paper-making wasp—Par- asites—Parsnip web-worm—Pea louse—Peach curculio— Peach twig-borer—Pear insect—Pear-leaf blister mite— Pear midge—Pediculi—Pediculidæ—Phosphorescent my- riopods—Poisonous spider in Madagascar—Pronuba—Pul- vinaria acericola—Purslane caterpillar—Red ants—Red spiders—Roaches—Rye gall-gnat—Scale insects—Scepsis edwardsii—Schizoneura panicola—Scorpions—Shade-tree insects—Six-spotted mite—South African ticks—Southern grain louse—Spiders—Squash bug—Squash-vine borer— Stalk worm—Stibadium spumacum—Stomata—Sugar-beet web worm—Syntomeida-epilais—Tarantulas—Tasmania— Texas—Thalessa—Thripidæ—Tiger swallow-tail—Tineid— Tortricid—Toxoptera—Tree crickets—Tremex—Twig prun- ers—Tyloderma—Typhlocyba—Vanessa antiapa—Vanessa Californica—Vedalia cardinalis—Viviparous cockroach— Walnut spanworm—Water bug—West Virginia—Western cricket—"Wheel bugs"—White ants—White grubs— Woolly aphis—Xanthium trypetæ—Xiphidium ensiferum— Yucca insects.	
Inspectors, general order to, relative to humane treatment of ani- mals. May 13, 1896 .....	A1.2:In7
Institutions, public, dietaries in (Atwater). 1901. p. 393.....	A1.10:901
Instrument room or division circulars .....	A29.11:
Insurance, hail, notes on (Abbe). 1901. *p. 219.....	A29.6:29.
Interior Department, relation of agricultural and mechanical colleges to, 1893 (Holcomb). p. 114 .....	A10.3:16
Internal revenue, 1863-65. p. 146 .....	A27.9:4
Interstate commerce in birds and game. 1902.....	A5.4:38
Interstate convention of cattlemen, 1890. See Fort Worth.	
Interstate Cotton Growers' Protective Association, officers of. 1901. p. 637.....	A1.10:901
Intestinal fever in swine. See Hog cholera.	
Invalid and infant foods, analysis of, provisional method for (Wiley). 1902. p. 41 .....	A7.3:65
Inventions:	
American, for cultivation by steam, history of (Brainerd). p. 253.	A1.1:867
Recent, for insect destruction (Breed). p. 323.....	A1.1:876
Iodide of potassium, treatment of lumpy jaw with (Norgaard). p. 135.	A4.1:891-2
Same (Norgaard). 1893. p. 39 .....	A4.3:2
Iowa:	
Chinch-bug observations in, in 1894 (Osborn). p. 230 .....	A9.7:7
Chinooks in, notes on (Abbe). 1897. p. 545.....	A29.6:25
Farm resources and products of. 1868. p. 202.....	A27.9:6
Fungous diseases of, new (Pammel). 1891. p. 95.....	A28.5:7
Grasses and forage plants of, notes on (Pammel). 1897 .....	A3.3:9
Hog cholera and swine plague investigations in, preliminary re- port (De Schweinitz). p. 501 .....	A4.1:899
Hog cholera in (Niles). p. 500.....	A4.1:898
Insects of (Osborn)—	
1887. p. 154 .....	A1.1:887
1889. p. 18 .....	A9.3:22
1890. p. 57 .....	A9.3:23
1891. p. 57 .....	A9.3:26
1892. p. 42 .....	A9.3:30
1893. p. 46 .....	A9.3:32
Insects of, as reported to Association of Economic Entomologists (Osborn)—	
1892. p. 111 .....	A9.7:5
1893. p. 193 .....	A9.7:6
1896. p. 78 .....	A9.6:6
Meteor of March 27, 1894, in (Abbe). p. 128 .....	A29.6:22
Meteorological records in, notes on (Abbe.) 1899. p. 17 .....	A29.6:27

# Index

	Classification no.
<b>Irrigation—Continued</b>	
Montana, investigations in, 1901 (Fortier). p. 225 .....	A10.3:119
Nevada, investigations in (Wilson). 1902. p. 147 .....	A10.3:104
New Jersey, report on (Voorhees). 1900 .....	A10.3:87
same (Voorhees). 1902. p. 353 .....	A10.3:119
New Jersey and Connecticut, notes on (Phelps and Voorhees). 1897 .....	A10.3:36
New Mexico, 1901 (Reed). p. 37 .....	A10.3:119
Officials and associations, list of. 1901 .....	A1.10:901
Orchards, methods in (McClatchie). 1900. p. 91 .....	A10.3:76
Pecos River and its tributaries, New Mexico (Reed). 1902. p. 61.	A10.3:104
Possible and actual influence of, on insect injury in New Mexico (Townsend). 1892. p. 78 .....	A9.7:5
Practical, report on (Johnston and Stannard). 1900. p. 491....	A1.10:900
Public control of (Mead). 1901. p. 680 .....	A1.10:901
Report on (Poston). p. 193 .....	A1.1:867
<b>Rice in—</b>	
North Carolina, South Carolina, and Georgia (Keeney). 1902. p. 59 .....	A10.3:113
United States. 1902 .....	A10.3:113
uplands of Louisiana and Texas (Bond). 1902. p. 11 .....	A10.3:113
Rise and future of, in U. S. (Mead). 1899. p. 591 .....	A1.10:899
Rocky Mountain States (Ulrich). 1899 .....	A10.3:73
Salinas Valley, Cal., problems in (Marx). 1901. p. 193 .....	A10.3:100
Salt River Valley, Arizona, investigations in, 1900 (Code). p. 83.	A10.3:104
same, 1901 (Code). p. 51 .....	A10.3:119
San Joaquin River, Cal. (Soulé). 1901. p. 215 .....	A10.3:100
Southern States, some of. 1891. Pt. 1. p. 323 .....	A15.2:Ir7 <sup>2</sup>
Study of recent progress in. 1897. p. 17 .....	A1.9:56
Systems of different countries. p. 275 .....	A1.1:871
Theories and practices (Charpentier de Cossigny). 1891. p. 268.	A15.2:P94 <sup>1</sup>
United States, testimony of Elwood Mead before U. S. Industrial Commission, June 11 and 12, 1901. 1901 .....	A10.3:105
United States (Hinton). 1887 .....	A15.2:Ir7 <sup>1</sup>
United States in 1890, progress report (Hinton). 1891 .....	A15.2:P94 <sup>1</sup>
Use of water in, report of investigations made in 1899, including reports by special agents and observers. 1900 .....	A10.3:86
Washington, use of water in, 1901 (Waller). 1902. p. 191 .....	A10.3:119
Water measurements for (Abbe). 1897. pp. 208, 545 .....	A29.6:25
Water supply and, in Mexico. 1885. p. 223 .....	A15.2:Ir7 <sup>1</sup>
Wheatland, Wyo., use of water for (Johnston). 1902. p. 207...	A10.3:104
<b>Winter—</b>	
note on (Abbe). 1900. p. 17 .....	A29.6:28
of deciduous orchards. p. 12 .....	A1.9:144
Wire in, use of, report on (Betts). 1899. p. 301 .....	A29.6:27
same (Abbe). 1899. p. 473 .....	A29.6:27
Wisconsin, experiments in (King). 1902. p. 313 .....	A10.3:119
Yakima Valley, Wash., use of water in (Waller). 1902. p. 241..	A10.3:104
<i>See also</i> Artesian and underflow investigation—California— Draining—Wyoming.	
Irrigation and cultivation of soil thereby, physical data; conditions and progress within U. S. for 1891 (Hinton) .....	A15.2:Ir7 <sup>2</sup>
Irrigation and its relation to State weather-service work (Salisbury). 1894. p. 24 .....	A29.3:14
Irrigation and land drainage, list of references to publications relating to (Hedrick). 1902 .....	A17.3:41
Irrigation conference, 1890. <i>See</i> Melbourne, Australia.	
Irrigation congress, 1900. <i>See</i> Chicago, Ill., national good roads and irrigation congresses.	
Irrigation Inquiry Office, Agriculture Department .....	A15.
Irrigation investigations. <i>See</i> Irrigation.	
<b>Irving, W.:</b>	
Gage canal, Riverside, California, duty of water under—	
1899. p. 131 .....	A10.3:86
1900. p. 137 .....	A10.3:104
1901. p. 146 .....	A10.3:119
Isabel Island, Mexico, reptiles of (Stejneger). 1899. p. 63 .....	A5.5:14

	Index
	Classification no.
Isabella grape in South America. 1866. p. 426 .....	A27.9:4
Isaria, Minnesota, species of, note on (MacMillan). 1891. p. 75 ...	A28.5:6
Island possessions of U. S.:	
Agricultural investigations in (Evans). 1901. p. 503 .....	A1.10:901
Agriculture in (Cook). 1901. p. 349 .....	A1.10:901
Sketches of. 1901. p. 685 .....	A1.10:901
<i>See also</i> Hawaii — Philippines — Porto Rico.	
Isobars, high-level, report on (Abbe). 1896. p. 419 .....	A29.6:24
Isobars and their accuracy (Abbe). 1896. p. 334 .....	A29.6:24
Isotherms for given altitude, notes on (Abbe). 1900. p. 166 .....	A29.6:28
Italian honey-bee, or culture and Italianization of native or black honey-bee (Colvin). p. 530 .....	A1.1:863
Italy:	
Agricultural education in (Paparelli). 1893. p. 326 .....	A10.6:4
Agricultural investigation in, institutions for (Paparelli). 1893. p. 233 .....	A10.6:4
Agriculture in—	
1871. p. 204 .....	A27.9:9
1876. pp. 425, 497 .....	A27.9:14
1876 (Andrews). p. 283 .....	A1.1:876
1885. No. 19. p. 36 .....	A27.9:23
American pork in, interdiction of. 1889. p. 129 .....	A27.9:27
Hemp in, special consular report on growth of (Gardini). 1897. p. 15 .....	A11.5:11
Irrigation in. 1891. p. 278 .....	A15.2:P94 <sup>1</sup>
Mountains of, meteorology of (Denza). 1896. p. 659 .....	A29.3:11 <sup>3</sup>
Seeds and plants collected in, by Barbour Lathrop and David G. Fairchild. 1900 .....	A6.6:6
Sorghum in. 1884. p. 77 .....	A7.3:3
Wool in, production and prices of. 1895. p. 144 .....	A27.9:33
<i>See also</i> Catania — Como — Milan — Sicily.	
Itch. <i>See</i> Texas itch.	
Ithaca, N. Y.:	
Simulium common at, notes on (Howard). 1888. p. 99 .....	A9.7:1
Swine-plague near (Law)—	
1879. p. 56 .....	A1.6:12
1880. p. 68 .....	A1.6:22
1881. p. 81 .....	A1.6:34
Ives, W. J., lards sent by, composition of. p. 188 .....	A7.1:889
Ixodes bovis, remarks on (Riley). 1869. p. 168 .....	A1.2:C29 <sup>1</sup>
Ixophorus, genus (Scribner). 1897. p. 5 .....	A3.3:4
Ixtle fiber, letter on (Murphy). 1869. p. 232 .....	A27.9:7
Same. 1870. p. 354 .....	A27.9:8
Jack rabbits of U. S. (Palmer) .....	A5.3:8
Jack-o-lantern, or ignis fatuus (Abbe). 1897. p. 211 .....	A29.6:25
Jackson, Charles. Flax-cotton; its adaptation to cotton machinery. p. 405 .....	A1.1:862
<i>See also</i> , as joint author, Moorhead, J. K.	
Jackson, J. F.:	
Address of, before convention of National League for Good Roads, Washington. 1893. p. 30 .....	A10.3:14
Roads, good, how to procure means to build. 1895. p. 29 .....	A22.3:11
Jackson, J. F. B. Road improvement in Jefferson County, Ala- bama. 1902. p. 31 .....	A22.3:23
Jackson, Sheldon. Agricultural and horticultural conditions in Yukon Valley, preliminary report on. 1898. p. 35 .....	A10.3:48
Jackson, W. H. Blood horse, essay on. 1882. p. 50 .....	A1.8:22
Jacobs, Miss Emma S. Domestic science, teaching, in rural districts. 1902. p. 96 .....	A10.3:120
Jaeger, Hermann:	
Grapevine, downy mildew and black-rot of, treatment of, with salts of copper, at Neosho, Mo.—	
1887. p. 29 .....	A6.3:5
1888. p. 29 .....	A6.3:10
1889. p. 65 .....	A6.3:11
Jaffa, Myer E.:	
California, farmers' institute work accomplished in. 1902. p. 16.	A10.3:120



# Index

	Classification no.
<b>Jaffa, Myer E.—Continued</b>	
California eggs, food value of. p. 510.....	A4.1:898
Fruitarians and Chinese, nutrition investigations among, at California Agricultural Experiment Station, 1899-1901 .....	A10.3:107
Nutrition investigations at California Agricultural Experiment Station, 1896-98 .....	A10.3:84
<b>Jamaica, West Indies:</b>	
Cinchona planting in (Parry). 1871. p. 120.....	A27.9:9
Climatological data for—	
1897 (Abbe). pp. 259, 308, 356, 444 .....	A29.6:25
1898. pp. 16, 60, 210, 308 .....	A29.6:26
1901 (Hall). pp. 214, 253, 304, 352, 407, 497, 595 .....	A29.6:29
1902. p. 69 .....	A29.6:30
1902 (Cousins). pp. 444, 487.....	A29.6:30
Hurricanes in, 1689-1880, note on (Abbe). p. 550.....	A29.6:28
Meteorological service, note on (Abbe). 1902. p. 183.....	A29.6:30
Rainfall of May, 1870-98, in, notes on (Abbe). p. 415.....	A29.6:26
same, 1899 (Abbe). p. 206.....	A29.6:28
Sun-spot period and temperature and rainfall of (Hall). 1901. p. 503.....	A29.6:29
Thunderstorms and clouds in (Abbe). 1896. p. 15 .....	A29.6:24
Weather bureau high level stations, note on (Abbe). 1897. p. 399.....	A29.6:25
Weather bureau service, 1898 (Hall). p. 303.....	A29.6:26
same, 1899 (Abbe.). p. 161 .....	A29.6:27
Jamaican coccidæ, food plants of some (Cockerell) 1893. pp. 158, 245 .....	A9.7:5
James, C. C. Agriculture, teaching, in public schools. 1902. p. 84.	A10.3:120
James, E. J. Government in its relation to forests. 1888. p. 23...	A13.3:2
James, Joseph F. Fossil fungi, notes on, 1891. p. 268 .....	A28.5:7
James River, Va. Freshets in, 1870-99 (Abbe). p. 156 .....	A29.6:28
Same, 1893-96 (Evans). p. 590 .....	A29.6:28
James River Valley, physical features and flood conditions of (Evans). 1899. p. 250 .....	A29.6:27
Janney, Samuel M. Virginia; her past, present, and future. p. 17.	A1.1:864
January, weather conditions for, statement of average (Garriott). p. 21.	A29.6:29
<b>Japan:</b>	
Agriculture in. 1873. (Capron.) p. 364.....	A1.1:873
same. 1891. p. 563 .....	A27.9:29
American butter in (Gowey). p. 521 .....	A4.1:898
Cereal crops. . 1893. p. 270 .....	A27.9:32
Flora of (Hogg). 1875. p. 178 .....	A27.9:13
Leather industry in (Lyon). p. 526 .....	A4.1:899
Locust in, migratory, occurrence of, in 1883 (Brooks). App. p. 59.	A8.1:3
Our trade with, 1889-1899. (Hitchcock).....	A12.3:18
Rice and silk culture, and agricultural education in (Tamari). 1885. p. 187 .....	A1.7:9
San Jose scale in, preliminary report on (Marlatt). 1902. p. 41.	A9.6:31
Tea culture in. 1872. p. 286 .....	A27.9:10
Treaty of Shimonoseki between China and, Apr. 17, 1895, and possibilities of U. S. trade with .....	A12.4:6
Weather bureau of (Wright). 1900. p. 381 .....	A29.6:28
Winds of Arizona and (Abbe). 1895. p. 255 .....	A29.6:23
See also Marlatt, Charles Lester.	
Japan current, studies of (Abbe). 1898. p. 366 .....	A29.6:26
Japanese Coccidæ, some new species of, with notes (Cockerell). 1896. p. 47 .....	A9.8:4
<b>Japanese insects:</b>	
Injurious, liable to be introduced into United States. 1896.....	A9.8:4
Injurious to fruit, two (Matsumura). 1898. p. 36.....	A9.6:10
Japanese oak-feeding silkworm, notes on cultivation of (Webster). 1889. p. 273 .....	A9.7:1
Japanese paper, manufacture of. 1872. p. 290.....	A27.9:10
Japanese peach fruit-worm, report on. 1889. p. 64 .....	A9.7:2
Japanese silkworm, parasite of, Ugimya sericarlæ rond. (Mik). 1891. p. 113 .....	A9.7:4



	<b>Index</b> Classification no.
Japanese strongyle ( <i>Strongylus subtile</i> ) which may possibly occur in returning American troops (Stiles). 1902. p. 41 .....	A4.3:35
Japy knapsack sprayer, improved (Galloway). 1891. p. 39 .....	A28.5:7
Jaques "cream pot" stock (Dodge). p. 292.....	A1.1:866
<i>See also</i> "Cream Pot" stock.	
Jarring for curculio on an extensive scale in Georgia, with list of insects caught (Scott and Fiske). 1902. p. 24 .....	A9.6:31
Java:	
Dutch East Indies, sugar-cane borers of (Zehntner). 1898. p. 32 .....	A9.6:10
Sugar in, diffusion and carbonatation of, extracts from report on (Lucassen). 1885. p. 49 .....	A7.3:8
Jefferson, Mark S. W.:	
Rain gages, reduction of records of. 1901. p. 499 .....	A29.6:29
Rainfall of Leeward and Windward islands. 1901. p. 56.....	A29.6:29
Jefferson, Thomas, as meteorologist (Randolph and Francis). 1896. p. 456.....	A29.6:23
Jefferson County, Alabama, road improvement in (Jackson). 1902. p. 31 .....	A22.3:23
Jefferson County, Colorado, agricultural resources of (Berthoud). 1869. p. 381* .....	A27.9:7
Jefferson County, Missouri, swine-plague in (McNutt). 1879. p. 173.....	A1.6:12
Jefferson Memorial and Interstate Good Roads Convention, Charlottesville, Va., Apr. 2-4, 1902, proceedings of. 1902.....	A22.3:25
Jefferson memorial road, Va. (Shaw). 1902. p. 27 .....	A22.3:25
Jenequen. <i>See</i> Sisal hemp.	
Jenkins, Edward Hopkins:	
Address of, as president of Association of Official Agricultural Chemists at fourth annual convention. 1887. p. 6.....	A7.3:16
Agricultural experiment work, cooperation of agricultural experiment stations with farmers' organization in. 1895. p. 50....	A10.3:24
Cigar-wrapper leaf, methods of experimenting with. 1901. p. 102 .....	A10.3:99
Jenkins, Edward Hopkins, and Winton, Andrew Lincoln. Feeding stuffs, American, compilation of analyses of. 1892.....	A10.3:11
Jenks, Charles N. Sheep husbandry in Texas. 1877. p. 122.....	A1.2:Sh3
Jennings, Thorp Buttolph. Storm-warning messages (Form 1043 C), should [they] be of some distinctive color to more readily attract attention? 1899. p. 53 .....	A29.3:24
Jennings, W. S.:	
Road improvement in Florida, progress of. 1901. p. 60.....	A22.3:21
Speech of, as permanent chairman, International Good Roads Congress, held at Buffalo, N. Y., Sept. 16-21, 1901. p. 17....	A22.3:21
Jensen, Charles A. <i>See</i> , as joint author, Gardner, Frank Duane.	
Jensen, Charles A., and Olshausen, B. A.:	
Soil survey of Boise area, Idaho. p. 421 .....	A26.5:901 <sup>1</sup>
Soil survey of Yakima area, Washington. p. 389 .....	A26.5:901 <sup>1</sup>
Jensen, Joseph. Electric engineering in Utah, development of. 1898. p. 91 .....	A10.3:49
Jensen process, new method of treating grain by, for prevention of smut (Galloway). 1891. p. 372 .....	A28.5:7
Jenter, C. G. Acid and alkali solutions, standardizing the more common, results obtained in. 1893. p. 43.....	A7.3:38
Jerked beef, or tasajo, manufacture and exportation of by River Plata countries. p. 399 .....	A4.1:899
Jerusalem artichokes:	
Description of. 1898. p. 10 .....	A1.9:73
For pigs. 1899. p. 20.....	A1.9:92
Jesunofsky, L. J. Frost formation, some peculiarities in, over coast region of South Carolina. 1902. p. 479.....	A29.6:30
Jewell, L. E. Aqueous vapor, relative qualities of in atmosphere, determination of, by means of absorption lines of the spectrum. 1896 .....	A29.3:16
Johns Hopkins University, meteorology at (Fassig). 1898. p. 306.	A29.6:26

\* By a misprint, this page number appears twice.

## Index

	Classification no.
Johnson, A. L. Timber trestle bridges, economical designing of....	A13.3:12
Johnson, Benjamin P., short biography of. 1869. p. 136.....	A27.9:7
Johnson, Edmund. Agriculture of Tuspan, Mexico. 1874. p. 498.	A27.9:12
Johnson, J. B.: Woods— mechanical tests made at Washington University testing lab- oratory, St. Louis, Mo. 1893. p. 3.....	A13.3:8
mechanical tests, results of. 1893. p. 22.....	A13.3:8
<i>See also</i> , as investigator, Fernow, Bernard Eduard.	
Johnson, Lawrence: Boll-worm ( <i>Heliothis armigera</i> ), report on. 1880. p. 150.....	A1.1:881-2
same, p. 150.....	A9.1:882
Cotton worm, boll worm, and other insects, report on. 1883. p. 53.	A9.3:1
Johnson, R. E. Decimal system of weights and measures. 1864. No. 6. p. 20.....	A27.9:2
Johnson, S. W. Address of, as president of Association of American Agricultural Colleges and Experiment Stations at 10th annual convention, 1896. p. 43.....	A10.3:41
<i>See also</i> , as joint author, Atwater, Wilbur Olin.	
Johnson, Willard Drake. Clouds, umbrella, notes on. 1898. p. 207.	A29.6:26
Johnson, Willis Grant: Aphelinus fuscipennis, an important parasite upon San Jose scale in eastern United States. 1900. p. 73.....	A9.6:26
Emory fumigator; new method for handling hydrocyanic-acid gas in orchards. 1899. p. 43.....	A9.6:20
Entomological notes, miscellaneous. 1899. p. 62.....	A9.6:20
Green pea louse, destructive ( <i>Nectarophora destructor</i> ), for 1900, notes upon. p. 55.....	A9.6:26
Hydrocyanic-acid gas— as remedy for San Jose scale and other insects. 1898. p. 39..	A9.6:17
results with, for destruction of insects in large buildings. 1901. p. 166.....	A10.3:99
Insects— little-known, of economic importance, note on some. 1897. p. 83.....	A9.6:9
of economic importance for 1900, notes on. p. 80.....	A9.6:26
Maryland— entomological notes from. 1896. p. 63.....	A9.6:6
insects, principal injurious, of year, notes on. 1897. p. 80...	A9.6:9
same. 1898. p. 92.....	A9.6:17
Nursery and orchard inspection, experiences in. 1901. p. 163..	A10.3:99
Pea louse, destructive, new and important economic species of genus <i>Nectarophora</i> . 1899. p. 94.....	A9.6:20
Scale insects, new and old, notes on. 1896. p. 74.....	A9.6:6
Stalk worm, new enemy to young tobacco. 1899. p. 99.....	A9.6:20
Johnson grass, investigations made during season of 1901 (Ball). 1902.....	A19.3:11
Johnston, C. T.: Irrigation discharge records and diagrams, computation and preparation of. 1900. p. 47.....	A10.3:86
Irrigation investigations for 1900, discussion of. 1902. p. 21....	A10.3:104
Water for irrigation at Wheatland, Wyo., use of. 1902. p. 207..	A10.3:104
Water supply of Bear River and its diversion. 1899. p. 9.....	A10.3:70
Wyoming, duty of water in. 1900. p. 171.....	A10.3:86
Johnston, C. T., and Stannard, J. D.: Irrigation, practical. 1900. p. 491.....	A1.10:900
Irrigation ditches, small, how to build. 1902.....	A1.9:158
Johnston, Jos. F. Alabama, road improvement in, extract from governor's message. p. 1.....	A22.4:33
Joint-worm attack, apparent, some features of (Webster). 1892. p. 89.....	A9.7:5
Joint-worm flies. <i>See</i> Grass and grain joint-worm flies.	
Jones, Calvin C. Cotton as surplus crop. 1870. p. 36.....	A27.9:8
Jones, Edmund. Storms, distant, indicated by tides at New York. 1894. p. 372.....	A29.6:22
Jones, Francois S. Argentine Republic, cattle and cattle products of, some statistics of. 1899. p. 515.....	A4.1:899

	Index
	Classification no.
Jones, Frank M. <i>Dermestes vulpinus</i> in goat skins. 1889. p. 63..	A9.7:2
Jones, Isaac. Alaska, interior of, reconnoissance along trail from Eagle to Valdez. p. 283.....	A10.1:901
Jones, J. D. Cork oak, growth of in U. S. 1895. p. 9.....	A13.3:11
Jones, J. L. Mule, its uses, how to breed, grow, prepare for the market, and sell. p. 335.....	A4.1:891-2
Jones, L. R. Potato blight and rot, comparative test of fungicides in checking. 1893. p. 89.....	A10.3:16
Jones, R. W.:	
Boll worm of cotton, report on. 1885. App. p. 17 .....	A8.1:4
Cotton worm ( <i>Aletia xyli</i> na), observations and experiments on, report of. 1883. p. 47.....	A9.3:1
Jones, T. C. Pacific coast, field crops and animal industry of. 1892. p. 59 .....	A1.8:20
<i>See also</i> , as joint author, Hilgard, Eugene Woldemar.	
Jones, Thomas C. Eggs, Madeira, exports of. p. 520 .....	A4.1:900
Jones, William J.:	
<i>Aletia</i> , report on. 1885. App. p. 55.....	A8.1:4
Cotton army worm, origin of, and best means of destroying. 1878. p. 356.....	A9.2:C82
<i>See also</i> , as joint author, Huston, Henry Augustus.	
Jordan, Whitman Howard:	
Agricultural experiment stations, American, growth and purpose in. 1901. p. 42.....	A10.3:99
Dietary studies at Maine State college in 1895 .....	A10.3:37
Digestion experiments, American, report on. 1896. p. 5.....	A10.6:6
Jordan, Whitman Howard, and Hall, Frank H. Digestibility of American feeding stuffs. 1900.....	A10.3:77
Journal of mycology, devoted to study of fungi, especially in their relation to plant diseases.....	A28.5:
Jouvea, leaf structure of (Ogden). p. 12.....	A3.3:8
Judd, Sylvester Dwight:	
Birds—	
as weed destroyers. 1898. p. 221.....	A1.10:898
four common, of farm and garden. 1895. p. 405 .....	A1.10:895
of a Maryland farm. 1902.....	A5.3:17
Food of nestling birds. 1900. p. 411.....	A1.10:900
Shrikes, food of. 1898. p. 15.....	A5.3:9
Sparrows, relation of, to Agriculture. 1901 .....	A5.3:15
Judd, Thomas. Almond in southwest Utah and southeast Nevada. p. 55.....	A20.1:895
July, weather conditions for, statement of average (Garriott). p. 307.	A29.6:29
Jumping mice of the genus <i>zapus</i> , revision of (Preble). 1899.....	A5.5:15
June, weather conditions for, statement of average (Garriott). p. 258.	A29.6:29
Jungfleisch, —, and Grimbert, —. Sugars, analysis of, some facts relative to. 1890. p. 135 .....	A7.3:28
Jupiter, Fla. Precipitation at, 1889-91. p. 108 .....	A29.6:20
Jute:	
Bengal crop. 1888. p. 539 .....	A27.9:26
Culture of ramie and. p. 261.....	A1.1:873
same (Lefranc). 1873 .....	A1.8:8
Culture, national importance, etc. (Waterhouse). p. 289 .....	A1.1:876
same (Waterhouse). 1883 .....	A1.8:30
Culture in U. S. 1871. p. 70 .....	A27.9:9
same. 1872. p. 490.....	A27.9:10
same (Dodge). 1896.....	A11.5:8
Introduction of. p. 171.....	A1.1:871
same. p. 402.....	A27.9:9
Louisiana. 1874. p. 389.....	A27.9:12
United States and India. p. 294.....	A1.1:874
<i>See also</i> Fibers — Flax — Hemp — Ramie and jute.	
Jute and other fibers in U. S. (Dodge). 1892. p. 91 .....	A27.8:1
Same, 2d ed. p. 91.....	A11.5:1
Juvisy, France, observatory of, physical and meteorological researches, principally on solar rays, made at station of agricultural climatology at (Flammarion). 1899. pp. 103, 203.....	A10.6:10

# Index

Classification no.

Kenealy, James:	
Lightning recorders and their utility in forecasting thunderstorms. 1902. p. 76 .....	A29.3:31
Meteorological observatory of St. Ignatius College, Cleveland, Ohio. 1901. p. 355 .....	A29.6:29
Kennebec River, ice in, report of (Abbe). 1897. p. 98.....	A29.6:25
Kennedy, A. R. Cattle and sheep industry of Colorado. p. 367....	A4.1:891-2
Kennedy, Patrick Beveridge:	
Caryopsis of grasses, structure of, with reference to morphology and classification .....	A3.3:19
Forage plants in Ontario, experiments with. 1899 .....	A3.4:20
Grasses and forage plants, cooperative experiments with. 1900..	A3.3:22
Saltbushes, report on. 1900 .....	A1.9:108
Smooth broom-grass. 1899.....	A3.4:18
Turkestan alfalfa. 1900 .....	A3.4:25
Kennels, disinfection of, by fire (Stiles). 1902. p. 15 .....	A4.3:35
Kenner, La., sorghum sugar, experiments at:	
1888 (Stubbs). p. 273 .....	A1.1:888
same, with additional matter. p. 46 .....	A7.3:20
1889 (Wiley). p. 10 .....	A7.3:20
1889 (Stubbs). p. 64 .....	A7.3:26
1889 (Wiley). p. 21 .....	A7.3:26
Kent County, Md., soil survey of (Bonsteel). p. 173.....	A26.5:900 <sup>1</sup>
Kentucky:	
Agricultural and mechanical college of. 1865. No. 6. p. 32....	A27.9:3
Aurora in (Abbe). 1895. p. 297.....	A29.6:23
Farm resources and products of. 1868. p. 127 .....	A27.9:6
Farmers' institute work accomplished in (Nall). 1902. p. 23...	A10.3:120
Gape disease of young poultry in (Garman). p. 504 .....	A4.1:898
Good roads in, organizations for (Van Pelt). 1901. p. 81 .....	A22.3:21
Highways, history of old and new systems (Crump). 1895.....	A22.3:13
Stock, sales of. 1870. p. 281.....	A27.9:8
Kentucky bluegrass seed, harvesting, curing, and cleaning (Pieters and Brown). 1902 .....	A19.3:19
Kentucky sheep, improved (Scctt). p. 334 .....	A1.1:866
Kenworthy, Charles J. Wool-growing in Australia. p. 204.....	A1.1:864
Kerkam's kites with rocket signals (Abbe). 1897. p. 206 .....	A29.6:25
Kerosene, experiments with, upon insects injuriously affecting orange tree and cotton plant. 1883 .....	A9.3:1
Kerosene emulsion:	
Experiments with (Osborn). 1891. p. 63 .....	A9.7:4
Historic notes on (Cook). 1891. p. 62 .....	A9.7:4
Pyrethrum and (Riley). 1891. p. 32.....	A9.7:4
Remedy for white grubs. 1888. p. 48.....	A9.7:1
Kerosene knapsack sprayer, modification of (Weed). 1895. p. 28..	A9.6:2
See also Knapsack.	
Kerry breed of cattle (Howard). p. 313 .....	A1.1:862
Kew gardens, England. 1870. p. 233 .....	A27.9:8
Kew Observatory, change at, note on (Abbe). 1900. p. 67.....	A29.6:28
Key, Sothoron. See, as joint author, Hicks, Gilbert Henry.	
Key West, Fla.:	
Gulf stream near, drift of, note on. 1900. p. 210 .....	A29.6:28
Waterspouts at (Boynnton). 1899. p. 351.....	A29.6:27
Kickbusch, F. W. Stettin, Germany, cost of hauling farm products over wagon roads at. p. 9.....	A22.7:27
Kidney worm of swine, our present knowledge of (Tayler). p. 612.	A4.1:899
Kiernan, John A. Cattle notes of southwestern Texas. p. 511.....	A4.1:899
Kilborne, F. L. Abortion in mares, outbreak of. 1893. p. 49.....	A4.3:3
See also, as joint author, Smith, Theobald.	
Kilborne, F. L., and Schroeder, Ernest C. Bovine tuberculosis in Soldiers' Home herd of 60 cattle, clinical notes on. 1894. p. 7 .....	A4.3:7
Kilgore, Benjamin Wesley:	
Address of, as president of Association of Official Agricultural Chemists, at 17th annual convention. 1900. p. 7 .....	A7.3:62
Ammonia, phosphomolybdate of, report on estimation of phos- phoric acid by titration of yellow precipitate of. 1894. p. 100.	A7.3:43

<b>Kilgore, Benjamin Wesley—Continued</b>	
Cotton-seed products, feeding value of. 1896. p. 385.....	A10.3:33
Fodders and green materials, fat in, preliminary report on estimation of. 1897. p. 98 .....	A7.3:5
Phosphoric acid, Pemberton's method of determination, comparison of, with official method by Francis Bergami. 1894. p. 97 .....	A7.3:43
Plant food, artificial requirements of soils. 1902. p. 73.....	A10.3:115
Kilgore, Benjamin Wesley, and Williams, C. B. Phosphoric acid, citrate-insoluble, comparison of results by old and new methods for. 1894. p. 108 .....	A7.3:43
Kilgore's modification of volumetric method of estimating phosphoric acid (Williams). 1901. p. 55 .....	A7.3:62
Killdeer plover, circular on. 1889 .....	A5.4:10
Killin, Benton. Agriculture in Alaska, report on. 1898. p. 29....	A10.3:48
<b>Kimball, Herbert H.:</b>	
Atmosphere, general circulation of, especially in Arctic regions. 1900. p. 408 .....	A29.6:29
Civil service examinations for weather observers in U. S. Weather Bureau. 1898. p. 548.....	A29.6:26
Climate of Antigua, W. I., seasonal variations in. 1890-1900. p. 168 .....	A29.6:29
Earthshine, variability of, some causes of. 1901. p. 209.....	A29.6:29
Ice caves and frozen wells as meteorological phenomena. 1901. p. 366 .....	A29.6:29
Meteorological notes, monthly .....	A29.6:
[Individual articles are entered in index under their specific subjects.]	
Rainfall from convectional currents. 1900. p. 483 .....	A29.6:28
Sun spots and weather, report on. 1901. p. 248.....	A29.6:29
Thunderstorm, automatic records of. 1899. p. 355.....	A29.6:27
<b>King, Franklin Hiram:</b>	
Ground water, fluctuations in level and rate of movement of, on Wisconsin Agricultural Experiment Station farm and at Whitewater, Wis., observations and experiments on. 1892 ...	A29.3:5
Irrigation experiments in Wisconsin. 1902. p. 313.....	A10.3:119
Irrigation in humid climates. Dec., 1896.....	A1.9:46
Lysimeter. What does a lysimeter teach? 1891. p. 106.....	A10.5:3
King, G. B. Horticulture, American, danger to, from introduction of injurious scale insects. 1901. p. 171.....	A10.3:99
King, William M. See, for reports as Chief, Seed Division, Agriculture Department, 1885-88.....	A24.1:
King, William Rice. Orange, relative merits of various stocks of, with notes on mal di goma and mutual influence of stock and scion. 1891 .....	A20.3:4
Kingbird, food habits of (Barrows). p. 233 .....	A1.1:893
Same, p. 233.....	A5.1:893
<b>Kings River, Cal.:</b>	
Evaporation experiments on. 1901. p. 323.....	A10.3:100
Water appropriation from (Grunsky). 1901. p. 259 .....	A10.3:100
Kingsessing and Tinicum meadow district, on Delaware River, drainage of (Ludlow). 1884. p. 240.....	A1.7:7
<b>Kinney, Abbot:</b>	
Eucalyptus, growth of, in U. S. 1895. p. 23.....	A13.3:11
Forests of Los Angeles, San Diego, and San Bernardino counties, Cal. 1888. p. 198.....	A13.3:2
Kirk, Robert J. Horses, American, in Denmark. 1898. p. 53 ....	A1.2:H78
<b>Kirkland, Archie Howard:</b>	
Arsenate of lead—	
improvement in manufacture of. 1899. p. 102 .....	A9.6:20
preparation and use of. 1897. p. 46 .....	A9.6:9
Brown-tail moth in Massachusetts, report on. 1900. p. 75.....	A9.6:26
Cranberry fireworm, probable remedy for. 1899. p. 53 .....	A9.6:20
Insect pests, four imported, notes on, 1902. p. 93.....	A9.6:31
Insecticide, new, report on. 1896. p. 27 .....	A9.6:6
Kirkwood, Mo., pyrethrum experiments at (Murtfeldt). p. 85....	A1.1:881-2
Same, p. 85.....	A9.1:882



# Index

	Classification no.
Kissing bug, insects to which name became applied during summer of 1899 (Howard). 1900. p. 24 .....	A9.6:22
Kitchen and table wastes, importance of loss of. p. 25 .....	A1.9:69
Kite and balloon station near Berlin, Germany, note on (Abbe). 1900. p. 13 .....	A29.6:28
Kite wire, lightning on, notes on (Abbe). 1898. pp. 170, 257 .....	A29.6:26
Kites:	
Aerial voyages by, notes on (Rotch). 1900. p. 553 .....	A29.6:28
America and Europe, notes on (Abbe). 1897. p. 165 .....	A29.6:25
Another use for, note on (Abbe). 1900. p. 252 .....	A29.6:28
Archibald on, report of (Abbe). 1897. p. 164 .....	A29.6:25
Balloons and, results of work with, at Trappes, France, notes on (Abbe). 1899. p. 411 .....	A29.6:27
Balloons, clouds, and kites, report on (Abbe). 1896. p. 206 .....	A29.6:24
Chicago conference, August, 1893, notes on (Abbe). p. 310 .....	A29.6:25
Development of, by European scientists (Abbe). 1897. p. 58 .....	A29.6:25
Experiments with, record of some (Eddy). 1898. p. 450 .....	A29.6:26
Exploration of air with, progress in, at Blue Hill Observatory, Mass. (Rotch). 1898. p. 355 .....	A29.6:26
Flying, early use of wire in (Fergusson). 1897. p. 135 .....	A29.6:25
France, note on (Abbe). 1897. p. 490 .....	A29.6:25
German Antarctic expeditions, work in, notes on (Abbe). 1901. p. 177 .....	A29.6:29
Kerkam's, with rocket signals (Abbe). 1897. p. 206 .....	A29.6:25
Madeira, work in, notes on (Abbe). 1898. p. 552 .....	A29.6:26
Mechanics and equilibrium of (Marvin). 1897. p. 136 .....	A29.6:25
Mechanics of, report on (Decker). 1897. p. 349 .....	A29.6:25
Meteorological observations with, at sea, notes on (Kimball). 1901. p. 563 .....	A29.6:29
Montana (Coe). 1896. p. 237 .....	A29.6:24
New field for, in meteorology (Kimball). 1901. p. 419 .....	A29.6:29
Observations of, 1898 (Frankenfield). 1898 .....	A29.5:F
Prize for flyers (Abbe). 1896. p. 374 .....	A29.6:24
Problem of, report on (McAdie). 1897. p. 246 .....	A29.6:25
San Francisco, Cal., experiments at (Hammon). 1896. p. 288 .....	A29.6:24
Spool, and kites with radial wings, notes on (Abbe). 1899. p. 154 .....	A29.6:27
Systematic exploration of atmosphere by means of, method for (Rotch). 1902. p. 66 .....	A29.3:31
Telephone (Abbe). 1898. p. 257 .....	A29.6:26
Telephone and, note on (Abbe). 1898. p. 366 .....	A29.6:26
Temperatures obtained by, at Bergen Point, N. J. (Allen). 1898. p. 161 .....	A29.6:26
Use of—	
in exploration of upper air (Marvin). 1898. p. 201 .....	A1.10:898
in meteorology, notes on (Abbe). 1896. p. 416 .....	A29.6:24
Used by Espy, note on (Abbe). 1897. p. 163 .....	A29.6:25
Weather Bureau experiments (Marvin). 1896. pp. 113, 156, 199, 238 .....	A29.6:24
Weather Bureau kite, report on (Marvin). 1896. p. 418 .....	A29.6:23
Weather Bureau observations in 1898, preliminary results of (Abbe). p. 413 .....	A29.6:27
Within a thunder cloud (Hovenden). 1898. p. 251 .....	A29.6:26
Work in, progress in, notes on (Abbe). 1898. p. 552 .....	A29.6:26
<i>See also</i> Bayonne, N. J. — Blue Hill Meteorological Observatory — Dansey's — Fisher, George — Franklin Kite Club — Newton, Isaac.	
Kjeldahl-Gunning method and a modification applicable in presence of nitrates (Voorhees). 1892. p. 85 .....	A7.3:35
Kjeldahl method, estimation of casein by (L'Hote). 1889. p. 170 .....	A7.3:24
<i>See also</i> Distilling flask — Nitrogen.	
Klamath Indians of Oregon, plants used by, notes on (Coville). 1897. p. 87 .....	A6.5:5
Klee, W. G.:	
Date, culture of. 1883 .....	A1.8:24
Fruits, tropical and semitropical, of California, Arizona, and New Mexico. 1891. p. 111 .....	A20.3:1
<i>See also</i> , as joint author, Behr, Herman.	



**Index**  
Classification no.

Klein, J. Milk, estimation of fat in, by Soxhlet's areometric method. 1888. p. 163.....	A7.3:24
Klippart, John H.:	
German agriculture, letter on. 1865. No. 6. p. 6.....	A27.9:3
Stettin, international fair at. 1865. No. 7. p. 6.....	A27.9:3
Klondike:	
Meteorological observations in, note on (Abbe). 1898. p. 253 ..	A29.6:26
Weather Bureau observations in (Myers). 1898. p. 209.....	A29.6:26
Klotz, O. J. Langsdorf, voyage of, 1803-7, notes from. 1898. p. 463.	A29.6:26
Knapp, J. G. Climate and products of Florida, statement of. 1885.	
No. 19. p. 23 .....	A27.9:23
Knapp, Seaman A.:	
Agricultural resources and capabilities of Porto Rico, with special reference to establishment of an agricultural experiment station on the island. 1901 .....	A10.2:P83
Education, limits of, under the law, at agricultural colleges. 1885. p. 163 .....	A1.7:9
Rice culture in U. S., present status of, 1899 .....	A6.3:22
same, 1900.....	A1.9:110
Knapsack kerosene attachment, some experiments with (Weed). 1895. p. 26 .....	A9.6:2
Knapsack sprayer, new, description of (Galloway). 1891. p. 51...	A28.5:6
<i>See also</i> Japy knapsack sprayer.	
Knight, O. W. Sugars, estimation of, by weighing precipitated cuprous oxid as such and as metallic copper, notes on. 1901. p. 111.....	A7.3:62
Knotweed, giant, or sachaline, circular relative to (Scribner). 1895.	A6.4:5
Knowles, Etta L. Fungi, abnormal structures in, induced by <i>Ustilago zeæ mays</i> , study of. 1889. p. 14 .....	A28.5:5
Knoxville convention, extract from proceedings of. 1889 .....	A10.4:3
Koebele, Albert:	
Australia, report of trip to, to investigate natural enemies of fluted scale. 1890 .....	A9.3:21
California insects, in 1889, report on. p. 85 .....	A9.3:22
Cottony cushion-scale and red scale, experiments on. p. 558 .....	A1.1:886
Entomological work in Oregon and California, notes on Australian importations. 1893. p. 33.....	A9.3:32
Hop [plant-] louse, experiments with, in Oregon and Washington. 1893. p. 12 .....	A9.7:6
Locusts near Folsom, California. 1885. p. 208.....	A1.1:885
Parasitic and predaceous insects in New Zealand, Australia, and adjacent islands, studies of. 1893.....	A1.8:51
Resin compounds, experiments with, on phylloxera, and general notes on California insects in 1890. p. 37.....	A9.3:23
Scale-insects, experiments against. p. 143.....	A1.1:887
Sugar-cane insects in New South Wales. 1892. p. 385.....	A9.7:4
<i>See also</i> Coquillett, Daniel William.	
Koeppen, F. T. Hessian fly, in Russia, translated by C. F. Gissler. 1883. App., p. 41.....	A8.1:3
Koeppen, W.:	
Climatology, present condition and recent progress of. 1896. p. 461 .....	A29.6:23
Weather predictions, best method of testing. 1894. p. 29.....	A29.3:11 <sup>1</sup>
Kremser, Victor:	
Atmosphere, upper, study of, by means of balloons. 1896. p. 725 .....	A29.3:11 <sup>3</sup>
Rainfall and charts of rainfall. 1902. pp. 233, 243.....	A29.6:30
Krichelt, F. W. River and flood service, monthly notes on, June-July, 1898.....	A29.6:26
<i>Same</i> June-July, 1899 .....	A29.6:27
Krug, William Henry:	
Dextrine, starch, dextrose, sucrose, and gum arabic, mixture of, attempt to analyze. 1894. p. 167.....	A7.3:43
Food and feeding stuffs for 1901, outline of work on.....	A7.4:7
Hide-powder tests, comparative, report on. 1901. p. 133.....	A7.3:62
Liège, Belgium, International Association of Leather Trade Chemists, 1901, report on meeting of. 1902. p. 147 .....	A7.3:67

# Index

Classification no.

Krug, William Henry—Continued	
<i>See also</i> , as collaborator and as joint author, Wiley, Harvey Washington.	
Kühn, Julius. Animals, domestic, feeding standards for. 1893. p. 6.....	A10.6:4
Kühn, M.: Milk—	
curdled, fat in, estimation of content of. 1890. p. 162 .....	A7.3:24
fat in, estimation of content of, by method of Soxhlet-Engström and Schmoeger-Neubert. 1890. p. 158.....	A7.3:24
Kuhn, von. German army horses, requirements for. 1898. p. 31.	A1.2:H78
Kuro siro, chinooks versus, notes on (Abbe). 1898. p. 114.....	A29.6:26
Labor, distribution of, in India and U. S. 1887. p. 366 .....	A27.9:25
Laboratory method of experimentation in economic entomology (Woodworth). 1891. p. 266 .....	A9.7:3
Laboratory work. <i>See</i> Horticulture.	
Lace, description and history of (Wilson). 1897. p. 359 .....	A11.5:9
Lacey, R. S. Cabbage worms, remedies for. p. 133 .....	A1.1:883
Same, p. 133.....	A9.1:883
Lachnosterna, notes on (Perkins). 1892. p. 389 .....	A9.7:4
Lachnosterna damage, case of. 1889. p. 365.....	A9.7:1
Lachnosterna fusca, notes on (Smith). 1888. p. 180 .....	A9.7:1
La Crosse, Wis., rainfall at, heaviest, notes on (Abbe). 1900. p. 448.	A29.6:28
Ladd, Eugene F. Dietary study of club of women students at North Dakota Agricultural College. 1901. p. 21 .....	A10.3:91
Ladé, von Roeszler. Nettles, experiments with. p. 562 .....	A1.1:878
Ladoga, Lake, from thermic point of view (Schokalsky). 1901. p. 63.	A29.6:29
Ladybird:	
Asiatic, importation and present status of, preliminary report on (Marlatt). 1902. p. 70 .....	A9.6:37
Australian, imported (Coquillett). 1889. p. 70 .....	A9.7:2
Parasite, report on (Riley). 1888. p. 101 .....	A9.7:1
Lafayette, Ind. <i>See</i> Purdue University.	
Lafayette Parish, La., soils and products of (Rapley). 1884. p. 14...	A1.8:35
Lafitte, Prosper de. Grape mildew, action of sulphate of copper on. 1886. p. 100 .....	A6.3:2
Lagerheim, G. <i>See</i> De Lagerheim.	
Lagoon Head, list of plants collected by Edward Palmer at, in 1889 (Vasey and Rose). 1890. p. 9.....	A6.5:1
Laisser-faire philosophy applied to insect problem (Marlatt). 1899. p. 5 .....	A9.6:20
Lake, Edward R.:	
Prune culture in Pacific Northwest. p. 41.....	A20.1:894
same, reprinted .....	A20.4:2
Prunes and prune culture in western Europe, with special reference to existing conditions in Pacific Northwest. 1901 .....	A20.3:10
Lake Charles area, La., soil survey of (Heileman and Mesmer.) p. 621.	A26.5:901 <sup>1</sup>
Lake commerce and insurance, notes on (Abbe). 1900. p. 556.....	A29.6:28
Lake County, Ohio, potato culture in (Abbott). p. 295 .....	A1.1:865
Lake Erie College, Painesville, Ohio, dietary study at (Bevier and Sprague). 1901. p. 27 .....	A10.3:91
Lake level, oscillations of, notes on (Abbe). 1900. p. 446.....	A29.6:28
Lake levels, variations in, and atmospheric precipitation (Henry). 1899 .....	A29.2:L15
Lake levels and wind phenomena (Henry). 1900. p. 203 .....	A29.6:28
Lake water, temperature of, notes on (Abbe). 1898. p. 167 .....	A29.6:26
Lakes:	
Deep, temperature of, notes on (Abbe). 1901. p. 71.....	A29.6:29
Fresh water, increase and decrease of (Abbe). 1898. p. 363....	A29.6:26
Ice in, sudden disappearance of, note on (Abbe). 1900. p. 114..	A29.6:28
same (Ten Broeck). 1900. p. 287 .....	A29.6:28
Influence of, on temperature of land, notes on (Abbe). 1900. p. 343 .....	A29.6:28
Oscillation of, in arid regions, notes on (Abbe). 1900. p. 544..	A29.6:28
Small, influence of, on local climate (Abbe). 1901. p. 563 ....	A29.6:29
Lambs:	
Feeding, in Colorado (Clarke). p. 275.....	A4.1:901

<b>Lambs—Continued</b>	
Feeding of, experiments in (Curtiss and Wilson). pp. 463, 466, 469 .....	A4.1:898
Vermineous bronchitis in, and its treatment by tracheal injections. p. 554 .....	A1.1:885
same. p. 554 .....	A4.1:885
Lamellicorns, Australian, new genus and two new species of (Sharp). 1890. p. 302 .....	A9.7:2
Lameness of horses; its causes and treatment (Liautard). p. 269 ...	A4.2:H78
Lamson-Scribner. <i>See</i> Scribner, Frank Lamson.	
Lancaster, Pa. Soil survey around (Dorsey). p. 61 .....	A26.5:900 <sup>1</sup>
<b>Land:</b>	
Distribution of, in France. 1888. p. 476 .....	A27.9:26
Drainage and irrigation, list of references to publications relating to (Hedrick). 1902.....	A17.3:41
Drainage in California. 1869. p. 231.....	A27.9:7
Improved, table of, in loyal States, 1850-60. No. 6. p. 12.....	A27.9:1
Low, cold air in (Abbe). 1896. p. 14.....	A29.6:24
Monopoly, evils of. 1888. p. 407 .....	A27.9:6
New, clearing (Williams). 1902.....	A1.9:150
<b>Public—</b>	
and forests. 1872. p. 65 .....	A27.9:10
in Mexico, prices of. 1889. p. 522.....	A27.9:27
open for settlement. 1901. p. 688 .....	A1.10:901
Reclamation of, in New Jersey, England, and Holland, reports of State geologist of New Jersey, 1869 and 1870. p. 221.....	A1.7:7
Swamp and overflow, reclamation of, in California. p. 179.....	A1.1:872
Temperature of, influence of lakes on, notes on (Abbe). 1900. p. 343 .....	A29.6:28
Worn-out, improvement of (Page). 1883. p. 207 .....	A1.7:2
<i>See also</i> Alkali lands—Forest lands—Grass lands—Marsh lands—Prairie lands—Salt-marsh lands—Tidal lands—Timber lands.	
Land birds of New England, oology of some, as a means of identifying injurious or beneficial species (Samuels). p. 386 .....	A1.1:864
Land-grant and bond-aided railroads, alphabetical list of, in U. S. 1902 .....	A13.2:R13 <sup>1</sup>
Land-grant colleges. <i>See</i> Agricultural colleges—Agricultural colleges and experiment stations.	
Land tortoise. <i>See</i> Florida land tortoise.	
Landis, D. S. Leonids at Phoenix, Ariz. 1901. p. 509.....	A29.6:29
Landon, M. D. Cotton-raising by free labor. p. 88.....	A1.1:864
Landscape gardening, report on. p. 159.....	A1.1:869
Landslide in Vermont, note on (Abbe). 1897. p. 307.....	A29.6:25
Lane County, Oregon, agriculture in. 1870. p. 84.....	A27.9:8
Lang, Thomas S. Roadsters and trotters, breeding of. p. 157.....	A1.1:864
Langdon nonswarming device, report of (Benton). 1893. p. 230 ..	A9.7:5
Langhorne, G. T. Brussels, importation of American horses into. 1897. p. 26 .....	A1.2:H78
<b>Langley, Samuel Pierpont:</b>	
Meteorological work of Smithsonian Institution. 1895. p. 216 ..	A29.3:11 <sup>1</sup>
Smithsonian Institution, Astrophysical Observatory of, annals of. 1902. p. 258 .....	A29.6:30
Langlois, A. B. <i>See</i> , as joint author, Ellis, J. B.	
Langsdorf, voyage of, 1803-07, notes from (Klotz). 1898. p. 463 ..	A29.6:26
Languria, notes on (Chittenden). 1890. p. 346.....	A9.7:2
<b>Langworthy, Charles Ford:</b>	
Alfalfa, when to cut. 1899. p. 24.....	A1.9:105
Apricots, cherries, peaches, plums, and prunes, food value of. 1899. p. 22 .....	A1.9:105
Banana flour, how it is prepared. 1900. p. 20 .....	A1.9:119
Bread making, skim milk in. 1900. p. 16 .....	A1.9:114
Calves, cost of raising. 1899. p. 21 .....	A1.9:107
Cereal breakfast foods, study of. 1899. p. 19 .....	A1.9:105
Coffee substitutes. 1900. p. 22.....	A1.9:122
Corn, moldy, feeding to animals. 1900. p. 26 .....	A1.9:122
Ducks, feeding, recent experiments in. 1899. p. 20.....	A1.9:107
Egg records, individual, nest box for keeping. 1900. p. 19.....	A1.9:114

# Index

	Classification no.
<b>Langworthy, Charles Ford—Continued</b>	
Eggs—	
flavor of, relation of feed to. 1900. p. 25.....	A1.9:122
selling by weight. 1900. p. 24 .....	A1.9:122
Eggs and their uses as food .....	A1.9:128
Fish as food. 1898 .....	A1.9:85
Food, functions and uses of. 1901 .....	A10.4:46
Forage crops for pigs. 1901. p. 25 .....	A1.9:124
Hay, spontaneous combustion of. 1899. p. 26 .....	A1.9:105
Hens, laying, number of, that may be profitably kept in one pen. 1900. p. 18.....	A1.9:114
Maple sirup and sugar. 1901. p. 21 .....	A1.9:124
Matter and energy, value of experiments on metabolism of. 1898. p. 1003 .....	A10.6:9
Molasses as a food for farm animals. 1899. p. 17 .....	A1.9:107
Nitrogen, metabolized, excretion of, by animals. 1897. p. 817..	A10.6:7
Nuts as food. 1900. p. 18.....	A1.9:122
Potatoes, value of, as food. 1900. p. 337.....	A1.10:900
Purslane, value as a food. 1900. p. 22 .....	A1.9:119
Soy beans as food for man. p. 20 .....	A1.9:58
Steers, grazing on corn and cowpeas. 1901. p. 27.....	A1.9:124
Tomatoes, fresh and canned. 1900. p. 21 .....	A1.9:119
<i>See also</i> , as joint author, Atwater, Wilbur Olin—Smith, C. B.; as translator, Stohmann, F.	
Lantern trap, for insects, successful, report on (Gillette). 1897. p. 75 .....	A9.6:9
La Paz, Lower California, plants collected by Edward Palmer in 1890 at, list of (Vasey and Rose). 1890. p. 63.....	A6.5:1
La Perouse, voyage of, notes from (Abbe). 1898. p. 461 .....	A29.6:26
Lapham, Increase Allen, biographical sketch of (Lapham). 1896. p. 36.....	A29.3:18
Lapham, J. E., and Miller, M. F. Soil survey of Montgomery County, Tennessee. p. 341.....	A26.5:901 <sup>1</sup>
Lapham, Julia A. Lapham, Increase Allen, biographical sketch of. 1896. p. 36 .....	A29.3:18
Lapham, Macy H. <i>See</i> , as joint author, Briggs, Lyman James.	
Lapham, Macy H., and Heileman, W. H.: Soil survey of Hanford area, California. p. 447.....	A26.5:901 <sup>1</sup>
Soil survey of lower Salinas Valley, California. p. 481.....	A26.5:901 <sup>1</sup>
Laramie Plains, Wyoming, duty of water on. 1899 (Fairfield). 1902. p. 215 .....	A10.3:104
<b>Lard:</b>	
Composition of, from dairy commissioner of Minnesota (Ives). p. 188 .....	A7.1:889
Pure and fictitious, methods of distinguishing between (Taylor). 1893 .....	A18.5:3
Lard and lard adulterants (Wiley). 1889. p. 405 .....	A7.3:13 <sup>4</sup>
Larger cornstalk borer. <i>See</i> Cornstalk borer, larger.	
Larkspur poisoning of sheep (Wilcox). p. 473 .....	A4.1:898
<b>Larned, Ellen D:</b>	
Snow in New England, report of, 1817-40. p. 75 .....	A29.6:22
Temperature observations at Thompson, Windham County, Conn., 1852-94. p. 364 .....	A29.6:21
Larrabee, J. H. Apiculture, experiments in. 1892. p. 57.....	A9.3:30
<b>Larvæ:</b>	
Comparative tests with new and old arsenicals on (Marlatt). 1896. p. 30 .....	A9.6:6
Preservation of, for study (Garman). 1893. p. 98 .....	A9.7:6
Larval cestode ( <i>Sparganum mansoni</i> ) of man, which may possibly occur in returning American troops (Stiles and Tayler). 1902. p. 47 .....	A4.3:35
Lathrop, Barbour, and Fairchild, David Grandison. Foreign seeds and plants collected by, in Austria, Italy, and Egypt. 1900 ..	A6.6:6
<b>Latta, William Carroll:</b>	
Address of, before American Association of Farmers' Institute Workers, at seventh annual meeting. 1902. p. 13 .....	A10.3:120
Indiana, farmers' institute work accomplished in. 1902. p. 21..	A10.3:120

<b>Latta, William Carroll—Continued</b>	
Local help in farmers' institutes. 1902. p. 36.....	A10.3:110
Money value of good roads to farmers. 1896.....	A22.4:23
Plats in field experimentation, form, size, arrangement, and treatment of. 1896. p. 83.....	A10.3:30
<b>Lattimore, S. A.</b> Spices and condiments, adulteration of. p. 296...	A1.1:886
<b>Lauder, J. N.</b> Locomotives, smoke-consuming device for. 1887. p. 132.....	A13.3:1
<b>Lavalard, E.</b> Horse feeding, notes on. 1902. p. 4.....	A10.6:12
<b>Law, James:</b>	
Animals, contagious diseases of, and means of suppressing and extinguishing. 1883. p. 19.....	A1.8:29
Anthrax among cattle in New York. 1881. p. 312.....	A1.6:34
Brussels, International Veterinary Congress, report of. p. 321...	A4.1:884
same. p. 122.....	A4.2:An5
Calves, young, diseases of. p. 267.....	A4.2:C29 <sup>2</sup>
<b>Cattle—</b>	
generative organs of, diseases of. p. 169.....	A4.2:C29 <sup>2</sup>
parturition of, diseases following. p. 235.....	A4.2:C29 <sup>2</sup>
urinary organs of, diseases of. p. 137.....	A4.2:C29 <sup>2</sup>
Cattle plague or rinderpest, transmission of through medium of dry or salted hides, opinion relative to. p. 321.....	A1.1:876
Cattle traffic in relation to cattle plague. 1883. p. 110.....	A1.7:2
Hog-cholera; intestinal fever in swine. p. 426.....	A1.1:875
<b>Horse—</b>	
eye of, diseases of. p. 247.....	A4.2:H78
generative organs of, diseases of. p. 135.....	A4.2:H78
skin of, diseases of. p. 419.....	A4.2:H78
urinary organs of, diseases of. p. 59.....	A4.2:H78
Influenza in horses. p. 203.....	A1.1:872
Pleuro-pneumonia of cattle, letters relative to. pp. 233, 237.....	A1.6:12
Pleuro-pneumonia or bovine lung plague, article on, in National live stock journal. 1880. p. 179.....	A1.6:22
Swine plague, report on, 1879. p. 420.....	A1.1:879
same, 1880. p. 455.....	A1.1:880
<b>Swine plague near Ithaca, N. Y.—</b>	
1879. p. 56.....	A1.6:12
1880. 2d report. p. 68.....	A1.6:22
1881. p. 81.....	A1.6:34
<b>Lawes, (Sir) John Bennett,</b> wheat experiments of, 1863-73. p. 596.....	A27.9:11
<b>Lawes, (Sir) John Bennett, and Gilbert, Joseph Henry.</b> Nitrogen in soils of some of the experimental fields at Rothamsted, determinations of, and bearing of results on question of sources of nitrogen of our crops. 1882. p. 142.....	A1.8:31
<b>Lawes, John Bennett, and Gilbert, Joseph Henry:</b>	
Soil, composition of, some points on, summary and conclusion. 1886. p. 25.....	A7.3:10
Wheat grain and wheat straw, grown at Rothamsted, in different seasons and by different manures, composition of ash of. 1884. p. 85.....	A7.3:4
<b>Lawes Agricultural Trust:</b>	
Six lectures delivered under, on investigations at Rothamsted experimental station, England, 1892 (Warrington).....	A10.3:8
same, 1893 (Gilbert).....	A10.3:22
<i>See also Dyer, Bernard.</i>	
<b>Lawes's views of fertility (Scott).</b> 1883. p. 76.....	A1.7:2
<b>Lawn-making. <i>See also</i> Lawns.</b>	
<b>Lawns and lawn-making (Scribner).</b> 1897. p. 355.....	A1.10:897
<b>Lawrence, E.:</b>	
Cultivation by steam. 1872. p. 358.....	A27.9:10
Plowing, steam, profit of. 1870. p. 149.....	A27.9:8
<b>Lawrence, H. E.</b> Steam plowing in Louisiana. p. 278.....	A1.1:867
<b>Lawrence, La.:</b>	
Sorghum-sugar experiments at. p. 254.....	A1.1:887
same, with additional matter. p. 77.....	A7.3:17
<i>See also Magnolia Station.</i>	



# Index

	Classification no.
Lawson, H. H. Chemists, Official Agricultural, Association of, 19th annual convention, 1902, report on. 1902. p. 107.....	A10.6:14
Lawson, H. W.:	
Cream raising by dilution. 1899. p. 28.....	A1.9:105
Dairy cow, type of, in relation to milk and butter production. 1901. p. 28.....	A1.9:124
Milk, preservation of, by pressure. 1899. p. 27.....	A1.9:105
Salt, dairy, study of various brands of. 1899. p. 28.....	A1.9:107
Lazenby, W. R. Horticulture, how shall we teach horticulture? 1896. p. 60.....	A10.3:30
Leach, Albert E. Saccharine products, analysis of, provisional method for. 1902. p. 43.....	A7.3:65.
Lead, arsenate of:	
Improvement in manufacture of (Kirkland). 1899. p. 102.....	A9.6:20
Preparation and use of (Kirkland). 1897. p. 46.....	A9.6:9
Leaf-blight, treatment of (Galloway). 1891. p. 11.....	A28.5:6
<i>See also</i> Nursery stock.	
Leaf curl of peach trees, letter of inquiry relative to (Willits). 1893.	A28.4:13
Leaf-cutter. <i>See</i> Morning-glory leaf-cutter.	
Leaf disease. <i>See</i> Nematode leaf disease.	
Leaf fibers of U. S., report on (Dodge). 1893.....	A11.5:5
Leaf-galls, cranberry, report on (Thomas). 1889. p. 279.....	A9.7:1
Leaf-mining locust beetle, with notes on related species (Chittenden). 1902. p. 70.....	A9.6:38
Leaf sickness of Begonia and Asplenium caused by Aphelenchus ole-sistus (Bos). 1893. p. 161.....	A9.7:6
Leaf structure of Jouvea and of Eragrostes obtusiflora (Ogden). 1897. p. 12.....	A3.3:8
Leaf tobacco, world's exhibit of, at Paris Exposition of 1900 (Floyd). p. 157.....	A1.10:900
Leaf-tyer of grape and elderberry (Chittenden). 1898. p. 82.....	A9.6:18
Leather:	
American production of (Bailey). p. 419.....	A4.1:887-8
German manufactures (Mason). p. 522.....	A4.1:899
Japanese industry in (Lyon). p. 526.....	A4.1:899
Russian industry (Holloway). p. 528.....	A4.1:899
Leather Trades Chemists, International Association of. 1901. <i>See</i> Liège, Belgium.	
Lebanon area, Pennsylvania, soil survey of (Smith and Bennett). p. 149.....	A26.5:901 <sup>1</sup>
Lebbek, or siris tree, circular on (Fairchild). 1900.....	A6.4:23
Lecanium infesting blackberry, considered identical with L. Fitchii (Cockerell). 1894. p. 29.....	A9.7:7
Le Clerc, J. A. Dairy products, analysis of, provisional methods for. 1902. p. 35.....	A7.3:65
Le Cocq, —. Novius cardinalis, introduction of, from America into Portugal, account of; translated by Frank Benton. 1898. p. 32.....	A9.6:18
Le Conte pear, Colaspis flavida injuring, note on. 1886. p. 40.....	A9.3:12
Le Duc, William Gates:	
Agriculture Department, work and needs of.....	A1.2:Ag8 <sup>1</sup>
Maize and sorghum sugars, circular letter relative to. 1879.....	A1.8:15
Sorghum sugar, letter to chairman of Senate Committee on Agri-culture on. 1880.....	A1.8:16
<i>See also</i> , for reports as Commissioner of Agriculture, 1877-80.....	A1.1:
Ledyard, F. W. Address of, before convention of National League for Good Roads, Washington. 1893. p. 27.....	A10.3:14
Lee, Fitzhugh. Address of, before Jefferson memorial and inter-state good roads convention. Apr., 1902. p. 11.....	A22.3:25
Lee, J. G. Louisiana, farmers' institute work accomplished in. 1902. p. 34.....	A10.3:120
Leeches, a disease of the horse in Florida; histological investigation of two cases of an equine mycosis, with historical account of supposed similar disease, called bursattee, occurring in India (Fish). p. 229.....	A4.1:895-6
Leeds, England, cost of hauling farm products over wagon roads at (Haines). p. 2.....	A22.4:27



	<b>Index</b>
	<b>Classification no.</b>
Leeward Islands:	
Rainfall of (Jefferson). 1901. p. 56 .....	A29.6:29
Reforestation and rainfall in (Alexander). 1901. p. 254.....	A29.6:29
Lefranc, Emile. Ramie and jute, culture and manufacture of, in U. S. 1873.....	A1.8:8
Legal holidays, list of. 1898. p. 677 .....	A1.10:898
Legumes. <i>See</i> Beans — Forage crops — Peas — Plants.	
Lehmann, G. W. Mineral phosphates, iron and alumina in, estima- tion of. 1897. p. 61 .....	A7.3:51
L'Hote, L. Casein, estimation of, by method of Kjeldahl. 1889. p. 170.....	A7.3:24
Leiberg, John B. Botanical survey of the Cœur d'Alene Mountains in Idaho during summer of 1895. p. 5.....	A6.5:5
Leibergia, a new genus of umbelliferae from Columbia River region (Coulter and Rose). 1896. p. 575.....	A6.5:3
Leisenring, O. D. River gage, brass, description of, at Richmond, Va., and its method of support. 1899. p. 456.....	A29.6:27
Lelong, B. F. Trees, plants, fruit, etc., inspection of, as conducted under laws of California. 1897. p. 12.....	A1.8:57
Lelong, B. M. <i>See</i> , as collector, Coquillett, Daniel William.	
Lemmings, genera and subgenera of (Miller). 1896.....	A5.5:12
Lemström, Selim. Sun, cosmical relations manifested in simulta- neous disturbances of, aurora, and terrestrial magnetic field. 1895. p. 492 .....	A29.3:11 <sup>2</sup>
Lenoir, W. W. Cattle disease, strange. 1879. p. 253 .....	A1.6:12
Leonia rileyi, description of, new meloid genus near Hornia (Duges). 1889. p. 211 .....	A9.7:1
Leonids at Havre, Mont. (Ling). 1901. p. 509 .....	A29.6:29
Leonids at Phoenix, Ariz. (Landis). 1901. p. 509 .....	A29.6:29
Leopard moth, ravages of, in Brooklyn, N. Y. (Pike). 1892. p. 317.	A9.7:4
Lepidoptera, noises made by, notes on (Edwards). 1889. p. 11....	A9.7:2
<i>See also</i> Moths.	
Lepidopterous insect, beautiful exotic, birth of, in New York (Edwards). 1891. p. 316 .....	A9.7:3
Lepidopterous larvæ, description of certain (Dyar). 1890. pp. 61, 389.	A9.7:3
Leplay, Hippolyte. Sorghum cane, culture and distillation of. 1887. p. 110.....	A7.3:18
Leptocoris trivittata injuring apples, note on. 1886. p. 41.....	A9.3:12
Lesley, J. P. Coal oil, composition and qualities, manufacture, use in arts, history of discovery, and theory of origin. p. 429 ....	A1.1:862
Lestophonus genus, note on (Williston). 1889. p. 328 .....	A9.7:1
Lettuce:	
Forcing, in pots. 1898. p. 10.....	A1.9:69
Head, soil and fertilizers for forcing. 1899. p. 15.....	A1.9:92
Leukæmia, infectious, in fowls, a bacterial disease frequently mis- taken for fowl cholera (Moore). p. 185 .....	A4.1:895-6
Leverett, T. H. Root crops; cultivation of, in U. S. p. 95.....	A1.1:863
Levi, Leo N. Address of, before good-roads convention of Texas, Feb., 1895. p. 8.....	A22.3:15
Lewis, Lowery Laymon. Veterinarians, value to, of cooperative ex- periments. 1898. p. 24 .....	A4.3:22
Liautard, A. Horse, lameness of; its causes and treatment. p. 269.	A4.2:H78
Libby, O. G. Tornado at New Richmond, Wis. 1899. p. 299.....	A29.6:27
Liberal, Kansas, sorghum-sugar experiments at (Wiley). 1889.....	A7.3:26
Liberia, climate of, notes on (Abbe). 1898. p. 215.....	A29.6:26
Libraries, Weather Bureau station, notes on (Abbe). 1901. p. 25..	A29.6:29
<i>See also</i> Agricultural libraries.	
Libraries and Weather Bureau, notes on (Abbe). 1898. p. 551 ....	A29.6:26
Library, Agriculture Department, work of (Cutter). 1897. p. 220..	A1.10:897
Library pest, imported, report of (Schwarz). 1895. p. 396 .....	A9.7:7
Lichens:	
California and Mexico, collected by Edward Palmer from 1888 to 1892, list of (Eckfeldt). 1893. p. 291.....	A6.5:1
Patagonia, southern, collected by U. S. S. Albatross in 1887-91, list of (Eckfeldt). 1892. p. 142.....	A6.5:1
Removal of, from pear trees, experiments with fungicides (Waite). 1891. p. 264 .....	A28.5:7

# Index

	Classification no.
Licorice-root cultivation, 1867-71. p. 72 .....	A27.9:10
Liebscher, G. Plants, cultivated, principles and methods of breeding. 1897. p. 347.....	A10.6:7
Liège, Belgium, International Association of Leather Trades Chemists, 1901, report on meeting of (Krug). 1902. p. 147 .....	A7.3:67
Life, loss of, by lightning (Henry):	
1890-1898, p. 45.....	A29.3:26
1899. p. 100 .....	A29.6:28
1900 .....	A29.3:30
Life zones. See Zones, life and crop.	
Light:	
Conditions, influence of, on process of germination (Detmer). 1895. p. 405 .....	A29.3:11 <sup>2</sup>
Precipitation, device for automatically recording beginning and ending of (Fassig). 1902. p. 213 .....	A29.3:31
Reflection by clouds of, from distant fire, note on (Abbe). 1901..	A29.6:29
Lightning:	
Ball—	
instance of, at sea (Seyboth). 1901. p. 249.....	A29.6:29
notes on (Abbe). 1898. pp. 358, 565.....	A29.6:26
same (Abbe). 1899. p. 364.....	A29.6:27
Can we, by automatic records at three selected places, determine the energy of a flash of? (McAdie). 1894. p. 18.....	A29.3:11 <sup>1</sup>
Casualties due to (McAdie). p. 510.....	A29.1:891 <sup>2</sup>
Cloudless sky, notes on—	
1900 (Abbe). pp. 292, 56 .....	A29.6:28
1900 (Ashcraft). p. 489.....	A29.6:28
1900 (Pague). p. 429 .....	A29.6:28
Death by, apparent, directions for procedure in case of. p. 533..	A1.10:894
Destruction by, in State of New York, Aug., 1898 (Allen). p. 357..	A29.6:26
Distant, currents induced by, note on (Abbe). 1898. p. 257 ....	A29.6:26
same (Abbe). 1899. p. 365 .....	A29.6:27
Does it ever strike ocean? (Trowbridge). 1902. p. 478 .....	A29.6:30
Electricity of air and (McAdie). 1899. p. 9 .....	A29.3:26
Fillet or ribbon, notes on (Abbe). 1899. p. 365 .....	A29.6:27
Flashes by pairs (Abbe). 1895. p. 383.....	A29.6:23
Forms of, note on (Abbe). 1897. p. 400 .....	A29.6:25
Kite wire, notes on (Abbe). 1898. pp. 170, 257 .....	A29.6:26
Loss of life and property by (Henry)—	
1890-98. p. 45 .....	A29.3:26
1899. pp. 100, 431.....	A29.6:28
1900 .....	A29.3:30
Losses by, note on (Abbe). 1899. p. 475.....	A29.6:27
Magnetic rocks and, note on (Abbe). 1897. p. 352.....	A29.6:25
Not ball, notes on (Abbe). 1898. p. 363 .....	A29.6:26
Notable, note on (Abbe). 1900. p. 290 .....	A29.6:28
Photographing, by daylight (Henry). 1895. p. 379 .....	A29.6:23
Practical utilization of (Abbe). 1897. p. 307 .....	A29.6:25
Protection from (McAdie).....	A29.2:L62
same, with additional matter .....	A29.3:15
Recorder, note on (Abbe). 1902. p. 313 .....	A29.6:30
Recorders and their utility in forecasting thunderstorms (Kenealy). 1902. p. 76 .....	A29.3:31
Ribbon, notes on (Abbe). 1898. p. 365 .....	A29.6:26
same (Abbe). 1899. p. 255 .....	A29.6:27
Safety fuse for, on anemometer, notes on (Abbe). 1898. p. 257..	A29.6:26
Serpentine (Kales). 1899. p. 461.....	A29.6:27
Thunder and, in December (Abbe). p. 464 .....	A29.6:23
Tin roofs as conductors of, notes on (Abbe). 1898. pp. 166, 258..	A29.6:26
Which trees attract lightning? (Abbe). 1898. p. 257.....	A29.6:26
Wire fences, notes on (Abbe). 1898. p. 466 .....	A29.6:26
Without thunder, note on (Abbe). 1900. p. 549.....	A29.6:28
Lightning rods, note on (Abbe). 1900. p. 12.....	A29.6:28
Liggett, W. M. Agricultural education, practical and scientific. 1900. p. 48.....	A10.3:76
Lignivorous insect, <i>Anthomyia angustifrons</i> , note on. 1886. p. 38 ..	A9.3:12

	<b>Index</b>
	<b>Classification no.</b>
<i>Limax campestris</i> , food of, further notes on (Webster). 1892. p. 128.	A9.7:5
<b>Lime:</b>	
Determination of, in soils (Snyder). 1895. p. 48.....	A7.3:47
Effect of, on different crops on acid soils. 1901. p. 6.....	A1.9:133
Fertilizer, investigations on. p. 21.....	A1.9:65
Fertilizing value of different forms of (Beal). 1901. p. 12.....	A1.9:124
Hydrate of, <i>Peronospora</i> overcome by (Cerletti). 1885. p. 71 ..	A6.3:2
Mineral phosphate of. 1867. p. 256.....	A27.9:5
Mixture of sulphate of copper and, for treatment of grape mildew (Millardet and Gayon). 1885. p. 108 .....	A6.3:2
Relation to plant growth, experimental study (May). 1901. p. 37.	A19.3:1
Use of, in purifying the diffusion juices of sugar cane and sorghum (Wiley) .....	A7.3:8
<i>See also</i> Hawaiian soils.	
Lime and its use (Watts). 1874. p. 449.....	A27.9:12
Lime and plaster, use of. 1863. No. 6. p. 13 .....	A27.9:1
<b>Lime-and-sulphur dip:</b>	
Experiments with, p. 506.....	A4.1:899
Reply to criticism, p. 548 .....	A4.1:898
Lime wash. <i>See</i> San Jose scale.	
Limekiln, economical. 1873. p. 360 .....	A27.9:11
Limestone, use of, for agricultural purposes. 1875. p. 123.....	A27.9:13
Liming grass lands (Beal and Smith). 1900. p. 5.....	A1.9:122
<b>Liming of soils:</b>	
From a physiological standpoint (Loew). 1901.....	A19.3:1
Report on (Wheeler). 1898 .....	A1.9:77
Lincoln, Geo. F. Poultry raising in Belgium. p. 506.....	A4.1:900
Lindenthal, G. Timber-trestle bridges, economical designing of, review of report of A. L. Johnson. p. 31.....	A13.3:12
Lindo-Gladding method of determining potash, use of sodium chlo- ride in (Winton). 1891. p. 148 .....	A7.3:31
<b>Lindsey, Joseph Bridges:</b>	
Darmstadt experiment station, report on. 1897. p. 3.....	A10.6:7
Feeding value of corn stover. 1896. p. 353.....	A1.10:896
Wagner method of pot culture. 1897. p. 77.....	A10.6:7
Lindsey, Joseph Bridges, and Holland, E. B. Phloroglucin method for estimation of pentosans. 1896. p. 53.....	A7.3:49
Linell, Martin L. <i>See</i> , as translator, Meinert, Fr.	
Linen industry in Silesia. 1873. p. 433 .....	A27.9:11
<b>Ling, Charles W.:</b>	
Leonids at Havre, Mont. 1901. p. 509.....	A29.6:29
Weather types at Havre, Mont. 1898. p. 410.....	A29.6:26
<b>Linney, Charles E.:</b>	
Climate and crop conditions, are changes in present forms for reporting weekly, advisable? 1899. p. 126.....	A29.3:24
Climate and vegetation. 1902. p. 98.....	A29.3:31
Frost predictions, value of, and best method of making them locally. 1894. p. 230 .....	A29.6:21
Meteorological observations, should not a book for permanent record of, be furnished to section centers and voluntary sta- tions? 1899. p. 121.....	A29.3:24
Meteorological records in court. 1902. p. 180.....	A29.3:31
Meteorology, agricultural, some notes on, with special reference to rainfall element. 1899. p. 85 .....	A29.3:24
Storms, approaching, effect of, upon song birds. 1898. p. 354...	A29.6:26
Linseed, linseed cake, etc. 1868. p. 37.....	A27.9:6
<b>Lintner, J. A.:</b>	
Address of, as president, Association of Economic Entomologists, at 4th annual meeting. 1892. p. 67.....	A9.7:5
Arsenical spraying of fruit trees while in blossom. 1893. p. 181.	A9.7:6
Cottonwood beetle, striped. 1895. p. 69 .....	A9.6:2
Elm leaf-beetle in Albany, N. Y. 1895. p. 50 .....	A9.6:2
New York, insects of year in, notes on some. 1896. p. 54.....	A9.6:6
<i>Liparis</i> ( <i>Psilura</i> ) <i>monacha</i> , ravages of, in Germany, and means of defense. 1891. p. 379.....	A9.7:3
<b>Lippincott, James S.:</b>	
Atmosphere, humidity of, observations on. p. 520 .....	A1.1:865

# Index

	Classification no.
<b>Lippincott, James S.—Continued</b>	
Fruit regions of northern U. S., and their local climates. p. 137.	A1.1:866
Grape vines, American, climatology of. p. 194 .....	A1.1:862
Market products of west New Jersey. p. 249 .....	A1.1:865
Plants, geography of. p. 464 .....	A1.1:863
<b>Liquid air:</b>	
Notes on (Abbe). 1897. p. 18 .....	A29.6:25
Source of power, notes on (Abbe). 1899. p. 110 .....	A29.6:27
<b>Liquid manuring, experiments in (Rand). p. 184 .....</b>	A1.1:867
<b>Liquids, viscous organic, dehydration of (Carr and Sanborn). 1895.</b>	
p. 134 .....	A7.3:47
<b>Liquor and food adulteration, committee on, of Association of Official Agricultural Chemists, report of:</b>	
1897. p. 117 .....	A7.3:51
1898. p. 78 .....	A7.3:56
1900. p. 100 .....	A7.3:62
1901. p. 75 .....	A7.3:67
<b>Liquors:</b>	
Distilled, examination of, provisional methods for. 1896. p. 113.	A7.3:49
Fermented, committee on, of Association of Official Agricultural Chemists, report on—	
1888. p. 38 .....	A7.3:19
1889. p. 173 .....	A7.3:24
1891. p. 14 .....	A7.3:31
1892. p. 171 .....	A7.3:35
1893. p. 143 .....	A7.3:38
1894. p. 148 .....	A7.3:43
<i>See, for reports for 1895 and 1896, Liquors, fermented and distilled, committee on.</i>	
Fermented and distilled—	
analysis of, provisional method for (Bigelow). 1902. p. 81.	A7.3:65
committee on, of Association of Official Agricultural Chemists, report of. 1895. p. 95 .....	A7.3:47
same. 1896. p. 116 .....	A7.3:49
<i>See also</i> Alcoholic beverages — Beer — Brandies — Chemical analysis, methods of — Distilled spirits — Fermented alcoholic beverages — Malt liquors — Wines and references thereunder.	
<b>Lists of publications of Agriculture Department. <i>See</i> Agriculture Department, indexes and lists.</b>	
<b>Little, Frank. Celery culture at Kalamazoo, Mich. p. 343 .....</b>	A1.1:886
<b>Little, H. J. Crops, rotation of, necessity and method of. 1883.</b>	
p. 85 .....	A1.8:36
<b>Little Colorado River, Desert of Arizona—</b>	
Reptiles and batrachians of (Stejneger). 1890. p. 103 .....	A5.5:3
Biological survey of, results of (Merriam). 1890 .....	A5.5:3
<b>Littlefield, Charles E. Address of, before Jefferson memorial and interstate good roads convention, Apr., 1902. p. 55 .....</b>	A22.3:25
<b>Littlehales, George Washington. Magnetic needle, secular change in direction of; its cause and period. 1894. p. 174 .....</b>	A29.3:11 <sup>1</sup>
<b>Live stock:</b>	
Boston receipts of, 1866–68. p. 22 .....	A27.9:7
British production. 1876. p. 417 .....	A27.9:14
Colorado and Territories of Northwest, condition of industry in (Standart). p. 326 .....	A4.1:885
Colorado and Wyoming industry, condition of (McNeely). p. 425 .....	A4.1:889–90
Condition of—	
1879. Nos. 10 and 13 .....	A27.9:17
1880. No. 23 .....	A27.9:18
1881. No. 32 .....	A27.9:19
Foot-and-mouth disease of—	
instructions concerning inspection for. 1902 .....	A4.2:F73
warning to all owners of cattle, sheep, and swine (Salmon) 1902 .....	A4.4:38
Foreign and interstate shipments of, federal inspection of (Salmon). p. 237 .....	A4.1:901
Foreign countries, statistics of. 1886. p. 25 .....	A27.9:24

**Live stock—Continued**

Freight rates on, from Chicago to New York. 1895. p. 553.....	A1.10:895
same. 1896. p. 598.....	A1.10:896
Great Britain and Ireland. 1895. p. 22.....	A27.9:33
Industry in, and weather (Brandenburg). 1900. p. 588.....	A29.6:27
Inspectors—	
miscellaneous reports of. 1897. p. 317.....	A4.1:895-6
reports from. 1892. p. 375.....	A4.1:891-2
International exhibitions of. See Hamburg, 1883; Chicago, Ill., 1900.	
Ireland, 1861-71. p. 331.....	A27.9:9
Items of interest from correspondents relative to—	
1885. p. 461.....	A4.1:885
1886. p. 283.....	A4.1:886
1887. p. 473.....	A4.1:887-8
Judging of, as farmers' institute work (Creelman). 1902. p. 113.	A10.3:120
Maryland, interests of (Patterson). p. 254.....	A4.1:886
same (Patterson). p. 466.....	A4.1:887-8
Meat products and, correspondence relating to export trade of (Rusk). 1893.....	A1.8:53
Mississippi River, industry west of, condition (Wilson). p. 429..	A4.1:885
Movement of, in France, 1865-67. p. 380.....	A27.9:5
Nebraska industry, condition of (Harwi). p. 382.....	A4.1:889-90
New York receipts of, 1867-68. p. 21.....	A27.9:7
same, 1869. p. 44.....	A27.9:8
Number of, in foreign countries. p. 442.....	A4.1:899
Prices, monthly, from markets, Jan., 1873-Dec., 1876.....	A27.9:
Russian Empire, for 1898. p. 606.....	A4.1:901
St. Louis, Mo., receipts of, 1868. p. 22.....	A27.9:7
Shipments of, from Canada, Argentina, and Australia to England. p. 77.....	A4.1:895-6
same, except Canada (Wray). p. 81.....	A1.1:895-6
Tennessee, interests in (Cockrill). 1883. p. 225.....	A1.7:2
Wisconsin, industry, condition of (Campbell). p. 321.....	A4.1:889-90
Work of breeder in improving (Clay). 1899. p. 627.....	A1.10:899
See also Cattle and references thereunder—Chicago, Ill., stock.	
Live stock and the markets—	
1899. p. 673.....	A4.1:899
1900. p. 569.....	A4.1:900
1899-1901. p. 650.....	A4.1:901
Live stock and their products, inspection of, rules and regulations for. Mar. 15, 1899.....	A4.5:33
Same, amendment. Oct. 22, 1900.....	A4.5:78
Live Stock Association, National, officers of—	
1898. p. 610.....	A1.10:898
1899. p. 688.....	A1.10:899
1900. p. 643.....	A1.10:900
1901. p. 637.....	A1.10:901
Live stock sanitary boards, State, list of. 1898. p. 603.....	A4.1:898
Same. 1899. p. 530.....	A4.1:899
Liverpool, England:	
Trade of, with U. S. (Boyle). p. 517.....	A4.1:899
Wool trade of. 1868. p. 35.....	A27.9:6
Liverworts from southern Patagonia, collected by U. S. S. Albatross in 1887-91, list of. (Evans). 1892. p. 140.....	A6.5:1
Loan associations, Raiffeisen, of Germany. 1891. p. 414.....	A27.9:29
Loblolly pine (Mohr). 1896. p. 107.....	A13.3:13 <sup>1</sup>
Same, with additional notes by Filibert Roth. 1897. p. 115....	A13.3:13 <sup>2</sup>
Local, meteorological use of term (Abbe). 1897, p. 208.....	A29.6:25
Locke, C. A. State and local road improvement societies, appeal for organization of. 1896.....	A22.4:22
Lockwood, Samuel:	
Army worm, invasion of 1880, in New Jersey, account of. 1883. p. 139.....	A8.1:3
same, p. 101.....	A1.1:881-882
same, p. 101.....	A9.1:882
"Loco" plant and its effect on animals (Stalker). p. 271.....	A4.1:886



# Index

	Classification no.
Locomotives, smoke-consuming device for (Lander). 1887. p. 132.	A13.3:1
Locust beetle, leaf-mining, with notes on related species (Chittenden). 1902. p. 70.....	A9.6:38
Locusts:	
American, damage by (Howard). 1894. p. 220.....	A9.7:7
California invasion, in 1891, report on (Coquillett). p. 34.....	A9.3:27
Cape Colony, S. A., in 1879. App., p. 68.....	A8.1:3
Certain outbreaks of, in Idaho (Milliken). 1893. p. 17.....	A9.7:6
China, in 1878. App., p. 65.....	A8.1:3
same, extermination of (Scatchkow). App. p. 65.....	A8.1:3
Damage by, destructive, in 1891.....	A9.3:27
Destructive, found in America, north of Mexico (Bruner)—	
1891. p. 9.....	A9.3:27
1892.....	A9.3:28
Destructive, in 1897 (Hunter). p. 40.....	A9.6:10
Folsom, California (Koebele). 1885. p. 308.....	A1.1:885
Kansas (Snyder). 1868. p. 456.....	A27.9:6
Killing of destructive, with fungous diseases (Bruner). 1902.	
p. 50.....	A9.6:38
Lesser migratory (Marlatt). 1889. p. 66.....	A9.7:2
Migratory—	
in Minnesota in 1891 (Lugger). p. 18.....	A9.3:27
occurrence of, in Japan, 1883. App., p. 59.....	A8.1:3
New Mexico and Arizona, injurious and other (Townsend).	
1893. p. 29.....	A9.7:6
North American—	
destructive, with notes on occurrences in 1891 (Bruner). 1891.	
p. 18.....	A9.7:4
extracts from early literature on (Berthoud). 1883. App.,	
p. 59.....	A8.1:3
Outlook, report on. 1892. p. 321.....	A9.7:4
Popular consideration of few of more injurious locusts (or "grass-	
hoppers") of U. S., with best means of destroying them	
(Riley). 1891.....	A9.3:25
Russia. 1883. App. p. 64.....	A8.1:3
San Joaquin Valley, California (Coquillett). p. 289.....	A1.1:885
Spain, destruction, in 1876. p. 263.....	A27.9:14
Swarms on coast of Great Britain (Swinton). 1883. App. p. 57..	A8.1:3
Texas, during spring of 1886, report upon (Bruner). 1887. p. 9.	A9.3:13
<i>See also</i> <i>Dissosteira longipennis</i> — Grasshopper — <i>Melanoplus spre-</i>	
<i>tus</i> — <i>Pezotettix</i> — Rocky Mountain locusts.	
Lodeman, E. G. Grapes, pruning and training of. 1896. p. 499...	A1.10:896
Lodge, William C.:	
Beef cattle, feeding, in Middle States. p. 212.....	A1.1:867
Fruits and fruit trees of Middle States; propagation, influence of	
stocks, diseases and enemies. p. 199.....	A1.1:865
Wine making and vine culture in Middle States. p. 118.....	A1.1:866
Loew, Hermann. Rye gall gnat, description of. 1883. App. p. 6..	A8.1:3
Loew, Oscar:	
Catalase, new enzyme of general occurrence, with special reference	
to tobacco plant. 1901.....	A1.8:68
Cigar-leaf tobacco, curing and fermentation of. 1899.....	A1.8:59
Connecticut tobacco, physiological studies of. 1900.....	A1.8:65
Mineral nutrients, physiological rôle of. 1899.....	A28.3:18
Soils, liming of, from a physiological standpoint. 1901.....	A19.3:1
Logan and Richmond Canal, Utah, duty of water under (Swend-	
sen). 1900. p. 211.....	A10.3:86
Logan River, irrigation under canals from (Swendsen). 1902.	
p. 179.....	A10.3:104
Loggin, E. W. Wool growing in Uruguay. 1870. p. 436.....	A27.9:8
Logotype outfit, vocabulary of present, should wording of forecasts	
be confined to? is it advisable to extend vocabulary of logo-	
type outfit? (Chaffee). 1899. p. 48.....	A29.3:24
Same (Chappel). 1899. p. 49.....	A29.3:24
Loncey, H. de. Horses, American, used by large horse companies	
in Paris. 1898. p. 42.....	A1.2:H78



	<b>Index</b> Classification no.
London, H. A. Address of, before national road conference, July, 1894. p. 21 .....	A22.3:10
London:	
Butter trade (Ashby). p. 211 .....	A4.1:899
Dead animals in, disposition of (Osborne). p. 346 .....	A4.1:899
Flour in, prices of. 1868. p. 38 .....	A27.9:6
Meat consumption in. 1874. p. 460 .....	A27.9:13
Meteorological office, notes on (Abbe). 1900. p. 68 .....	A29.6:28
Poultry for London market, preparing (Lowe). p. 333 .....	A4.1:899
Wastes of, method of disposing of (Manning). 1872. p. 379 .....	A27.9:10
London International Exhibition of 1862, account of (Hoyt). p. 27 ..	A1.1:862
Long, D. N. Brick wheel-track road. 1901. p. 68 .....	A22.3:21
Long Branch, N. J., local contrast of weather at, Jan. 1895 (Abbe). p. 13 .....	A29.6:23
Long Island:	
Menhaden fisheries of. 1870. p. 39 .....	A27.9:8
Waterspouts off (Abbe). 1897. p. 207 .....	A29.6:25
Long-range weather forecasts, report of (Pague). 1896. p. 166 .....	A29.6:24
Long-tailed shrews. <i>See</i> Shrews.	
Longino, A. H. Road question, importance of. p. 18 .....	A22.3:21
Longleaf pine:	
Report on (Mohr). 1896. p. 29 .....	A13.3:13 <sup>1</sup>
same, with additional notes by Filibert Roth. 1897. p. 29 ..	A13.3:13 <sup>2</sup>
Timber of, effect of turpentine gathering on (Fernow) .....	A13.4:9
Trees of, chemical study of resinous contents and their distribu- tion in, before and after tapping for turpentine (Gomberg). 1893. p. 34 .....	A13.3:8
Longley, A. T.:	
<i>See</i> , for reports as Chief, 1890-92, Document and Folding Room, Agriculture Department.	
<i>See</i> , for reports as Chief, Seed Division, Agriculture Department. 1889 .....	A24.1:
Loomis, L. C. Food, preservation of. p. 470 .....	A1.1:862
Loomis, Silas L. Cattle, neat, distribution and movement of, in U. S. p. 248 .....	A1.1:863
Lophophora, North American species of, preliminary revision of (Coulter). 1892. p. 91 .....	A6.5:3
Lord, Wm. P. Oregon, road improvement in, extract from gov- ernor's message. p. 7 .....	A22.4:33
Loring, George Bailey:	
Address of, with other proceedings of cotton convention, Atlanta, Ga., Nov. 2, 1881 .....	A1.8:17
Cattle industry, address on, at National Convention of Cattle Breeders, Chicago, Ill., Nov. 13, 1884 .....	A1.7:6
Dairy farming, address on. 1882. p. 91 .....	A1.8:22
Forestry in U. S., address on, before American Forestry Congress, Saint Paul, Minn., Aug. 8, 1883 .....	A1.7:1
Sorghum-sugar industry, address on. 1883 .....	A1.6:54
<i>See also</i> , for reports as Commissioner of Agriculture, 1881-84 .....	A1.1:
Los Angeles County, Cal.:	
Forests of (Kinney). 1888. p. 198 .....	A13.3:2
Horticultural commission, report of. 1890. p. 312 .....	A9.7:2
Los Angeles River, Cal., study of water rights on (Boggs). 1901. p. 327 ..	A10.3:100
Lotsy, J. P. Nitrogen, free atmospheric, assimilation of, by white and black mustard, contribution to investigation of. 1894 .....	A10.3:18
Loughridge, R. H. Soils, physical tests of. 1893. p. 156 .....	A10.3:16
Louisiana:	
Anthrax in, in 1896 (McQueen). p. 176 .....	A4.1:897
Cotton in, 1866. p. 281 .....	A27.9:4
Cotton in, date of receipt of, 1857-70. p. 356 .....	A27.9:8
De Soto hogs of. 1883. No. 64. p. 16 .....	A27.9:21
Farm resources and products of. 1868. p. 85 .....	A27.9:6
Farmers' institute work accomplished in (Lee). 1902. p. 34 .....	A10.3:120
Hurricane of August 13-16, 1901, on coast of .....	A29.2:H94
Jute in, 1874. p. 389 .....	A27.9:12
Rice crop, statement on, 1860-69. p. 430 .....	A27.9:8
Southwestern, soils and products of (Rapley). 1884 .....	A1.8:35

# Index

Classification no.

## Louisiana—Continued

- Steam ploughing in (Lawrence). p. 278 ..... A1.1:867  
 same. 1869. p. 225 ..... A27.9:7  
 Sugar-cane borer in, life history of (Morgan). 1902. p. 128 .... A10.3:115  
 Sugar cane in, diffusion process as applied to (Seig). p. 40..... A1.1:884  
 same. 1884. p. 18 ..... A7.3:2  
 Sugar production, 1874-75. p. 456 ..... A27.9:13  
 Truck farming in (Wiggins). 1887. p. 240 ..... A27.9:25  
 Uplands of, irrigation of rice on (Bond). 1902. p. 11 ..... A10.3:113  
*See also* Calumet plantation sugar experiment station—Des  
 Linges sugar experiment station—Iberia parish—La Fayette  
 parish—Lake Charles—Kenner—Magnolia Station—  
 New Orleans—St. Landry parish—St. Martin parish—St.  
 Mary parish—Vermilion parish.  
 Louisiana fungi, new species of (Ellis and Langlois). 1891. p. 35.. A28.5:6  
 Louisville, Ky., convention of tobacco growers at, 1865, comments  
 on resolutions of. No. 8. p. 16 ..... A27.9:3  
 Lounsbury, Charles P.:  
 Good Hope, Cape of, insects of, notes on. 1897. p. 34..... A9.6:9  
 South African ticks, notes on some. 1900. p. 41 ..... A9.6:26  
 Lounsbury, Charles P., and Mally, C. W. Hydrocyanic-acid gas,  
 notes. 1902. p. 75..... A9.6:31  
 Lounsbury, George E. Connecticut, road improvement in, extract  
 from governor's message. p. 2..... A22.4:33  
 Loveland, George A.:  
 Climate and crop sections, Weather Bureau, should monthly re-  
 ports of, contain only original matter? 1902. p. 187..... A29.3:31  
 Meteorological observations, should not a book for permanent  
 record of, be furnished to section centers and voluntary sta-  
 tions? 1899. p. 120 ..... A29.3:24  
 Meteorology in colleges; to what extent is it taught at present;  
 should it be offered as an undergraduate or as a postgraduate  
 course? 1902. p. 90..... A29.3:31  
 Lowe, S. Poultry, preparing, for London market. p. 333 ..... A4.1:899  
 Lowe, William Herbert:  
 Cattle, organs of respiration of, noncontagious diseases of. p. 101. A4.2:C29<sup>2</sup>  
 Tumors of cattle. p. 321..... A4.2:C29<sup>2</sup>  
*See also*, as joint author, Dickson, William.  
 Lower California. *See* La Paz—Santa Agueda—Santa Rosalia.  
 Lower Colorado River, Arizona, free-tailed bat from, description  
 of new species (Merriam). 1889. p. 25..... A5.5:2  
 Lowndes, Lloyd. Maryland, road improvement in, extract from  
 governor's message. p. 4..... A22.4:33  
 Lucas, Frederick Augustus. Tongues of woodpeckers. 1895. p. 35. A5.3:7  
 Lucassen, M. D. Sugar, diffusion and carbonatation of, in Java,  
 extracts from report on. 1885. p. 49..... A7.3:8  
 Lucern. *See* Alfalfa.  
 Lucilia nobilis parasitic on man (Meinert). 1892. p. 36 ..... A9.7:5  
 Ludlow, William. Kingsessing and Tinicum meadow district, on  
 Delaware River, drainage of. 1884. p. 240 ..... A1.7:7  
 Lugger, Otto:  
 Migratory locusts in Minnesota in 1891. p. 18..... A9.3:27  
 Spilosoma fuliginosa, report on. 1890. p. 236..... A9.7:2  
 Lumber:  
 Consumption of ties and other, by railroads in U. S. p. 41..... A13.3:4  
 New York State, industry, history of (Fox). 1902..... A13.3:34  
 Quality, etc., of. 1895. p. 590..... A1.10:895  
 same. 1896. p. 628 ..... A1.10:896  
 Lumber trade:  
 Certain States (Baker). 1884. p. 198 ..... A13.5:4  
 Chicago, 1857-68. p. 62 ..... A27.9:7  
 Letter from agent of Forestry Division requesting information  
 relative to. 1883 ..... A13.2:L97  
 New Hampshire and West Virginia (Hough). 1884. p. 348 .... A13.5:4  
 Western States and Territories (Furnas). 1884. pp. 246, 255... A13.5:4  
 Lumbering:  
 Conservative, and water supply, discussion of (Newell). 1901. p. 3. A13.3:30

<b>Lumbering—Continued</b>	
Southern Appalachians now and under Government ownership and supervision (Price). p. 61 .....	A1.2:Ap4 <sup>2</sup>
<b>Lumbermen:</b>	
Practical assistance to, in handling forest lands (Pinchot). 1898.	A13.4:21
Suggestions to, relative to more rational forest management (Fennow) .....	A13.4:10
<b>Lumpy jaw, or actinomycosis in cattle:</b>	
Investigations relating to treatment of (Salmon)—	
1891 and 1892. p. 109 .....	A4.1:891-2
1893 .....	A4.3:2
1893 and 1894. p. 88 .....	A4.1:893-4
same. n. d. ....	A4.4:7
Successful treatment of (Moore). p. 510 .....	A4.1:899
Treatment of, with iodide of potassium (Nørgaard). p. 135 ....	A4.1:891-2
same (Nørgaard). 1893. p. 39 .....	A4.3:2
Lunar halo and luna corona, notes on (Abbe). 1901. p. 566.....	A29.6:29
Lunar halos (Finney). 1894. p. 76 .....	A29.6:22
Lunar influences in meteorology, notes on (Abbe). 1901. p. 315 ..	A29.6:29
Lunar rainbow, notes on (Abbe). 1898. pp. 67, 364 .....	A29.6:26
Lung plague of cattle. <i>See</i> Pleuro-pneumonia.	
Lupton, N. T. Address of, as president of Association of Official Agricultural Chemists, at 9th annual meeting, 1892. p. 2.....	A7.3:35
Lurman, Gustav W. Address of, before convention of National League for Good Roads, Washington. 1893. p. 18.....	A10.3:14
<b>Lyman, Charles P.:</b>	
Foot-and-mouth disease. 1881. p. 33 .....	A1.1:881-2
Letter to Dr. Thomas Taylor on work of his microtome. 1881....	A18.2:M58
Pleuro-pneumonia, contagious, in cattle—	
1st report, 1879. p. 456.....	A1.1:879
[Also issued as 46th Cong., 2d sess., S. mis. doc. 74; serial no. 1891.]	
same, p. 163 .....	A1.6:22
2d report. 1880. p. 196 .....	A1.6:34
[Also issued as 46th Cong., 3d sess., S. ex. doc. 5; serial no. 1941.]	
3d report. 1880. p. 571.....	A1.1:880
same.....	A1.6:31
same. p. 268.....	A1.6:34
4th report. p. 30.....	A1.1:881-2
[5th] final report. 1881. p. 352 .....	A1.1:881-2
Lyman, H. L. Grape vine, downy mildew and black rot of, treatment of, with salts of copper at Charlottesville, Va., in 1887. p. 5 .....	A6.3:5
Same. 1888. p. 20.....	A6.3:10
Lyman, Joseph B. Cotton planting, directions for. p. 193 .....	A1.1:866
Lymph-adenitis. <i>See</i> Ovine caseous lymph-adenitis.	
Lyon, Frank W. Convict labor, use of, in road building. 1901. p. 90 .....	A22.3:21
Lyon, J. L. Grass and forage plants, cooperative experiments with. 1902. p. 71 .....	A10.3:115
Lyon, Samuel S. Leather industry in Japan. p. 526 .....	A4.1:899
Lyon, T. T. Russian and other fruits, adaptation of, to extreme northern portions of U. S. 1888 .....	A20.3:2
<b>Lyons, Curtis J.:</b>	
Dew-point, tables of, observed at Honolulu. 1899. p. 587 .....	A29.6:27
Hawaiian climatological data, monthly, May, 1901-Oct., 1902....	A29.6:
Meteorological observations, monthly, at Honolulu, Hawaiian Islands, March, 1894-April, 1901.....	A29.6:
Sun spots and Hawaiian eruptions, report on. 1897. p. 144.....	A29.6:27
Volcanic eruptions in Hawaii. 1899. p. 298 .....	A29.6:27
<b>Lyons, Patrick F.:</b>	
Meteorological records in court. 1902. p. 183 .....	A29.3:31
Weather forecasts, distribution of, by mail. 1899. p. 161.....	A29.3:24
Weather forecasts, should temperature be verified by maximum and minimum readings. 1902. p. 167.....	A29.3:31
Lyons, France, 3d international meteorological congress at, general report on hail shooting presented at (Plumandon). 1902. p. 35.	A29.6:30

# Index

	Classification no.
Lysimeter. What does a lysimeter teach? (King). 1891. p. 106...	A10.5:3
Lysiphlebus, braconid genus, variations in (Coquillett). 1891. p. 313.	A9.7:3
Macadam, Robert K. North American agarics, report on. 1889. pp. 58, 135.....	A28.5:5
Macadamized roads. See Roads.	
McAdie, Alexander G.:	
Aero-physical observatory, equipment of. 1896. p. 453 .....	A29.6:24
Alto-stratus, whirling, report on. 1897. p. 245 .....	A29.6:25
Atmospheric electricity, some experiments in. 1891. p. 171....	A29.6:19
California, rainfall charts of. 1902. p. 362 .....	A29.6:30
Casualties due to lightning. p. 510 .....	A29.1:891 <sup>1</sup>
Climate as controlling factor in long-distance transmission of elec- trical energy. 1897. p. 439.....	A29.6:25
Climatological data, interchange of standard. 1899. p. 135 .....	A29.3:24
Cloud observations, utilization of, in local and general weather predictions, 1894. p. 21.....	A29.3:11 <sup>1</sup>
Fog studies on Mount Tamalpais, etc.—	
1900. pp. 283, 492.....	A29.6:28
1901. pp. 24, 61, 104 .....	A29.6:29
1901. p. 31 .....	A29.3:31
Frost fighting—	
1899. p. 111 .....	A29.3:24
1900 .....	A29.3:29
1901. p. 65 .....	A29.6:29
Kite, problem of, report on. 1897. p. 246.....	A29.6:25
Lightning—	
can we, by automatic records at three selected places, deter- mine the energy of a flash of? 1894. p. 18.....	A29.3:11 <sup>1</sup>
protection from. 1894 .....	A29.2:L62
same, with additional matter. 1895.....	A29.3:15
Lightning and electricity of air. 1899. p. 9.....	A29.3:26
Meteorological observations, simultaneous, in U. S. during 18th century. 1895. p. 303.....	A29.3:11 <sup>1</sup>
San Francisco weather forecast district, report of, monthly, Apr.— July; Sept., 1899–July, 1900; Nov., 1900–July, 1901; Sept.— Nov., 1901; Jan.–Oct., 1902 .....	A29.6:
Storm warnings and displays by flag and lantern, are present best that can be devised for Atlantic and Gulf coasts? 1899. p. 29.....	A29.3:24
McAdie, Alexander G., and Willson, George H. San Francisco, Cal., climate of. 1899 .....	A29.3:28
Macaroni and semolina, manufacture of (Skinner). 1902 .....	A19.3:20
Macaroni wheats (Carleton). 1901 .....	A19.3:3
McBride, F. W. See, as joint author, Huston, Henry Augustus.	
McBryde, J. Bolton, and Beal, Walter Henry. Cotton, chemistry of. 1896. p. 81 .....	A10.3:33
McBryde, J. M. Fertilizers for cotton. 1894.....	A1.9:14
McCallie, S. W. Roads and road-building materials of Georgia. 1902. p. 50.....	A22.3:23
M'Cann, D. J. Sheep-husbandry in Nebraska. p. 193 .....	A1.1:864
McCarthy, Gerald. Crop-pests and their repression by law. 1897. p. 19.....	A1.8:57
McCarty, J. H. Meteorology, recent publications on. 1896. pp. 76, 112, 153, 198.....	A29.6:24
McChesney, J. H.:	
Agricultural colleges and model farms, letter on. 1868. p. 460..	A27.9:6
Agricultural education in Europe. p. 127 .....	A1.1:868
McChesney, J. W. Esparto grass, information on. 1869. p. 233 ..	A27.9:7
McClatchie, Alfred James:	
Eucalypts cultivated in U. S. 1902 .....	A13.3:35
Irrigation at Arizona experiment station farm. 1900. p. 125....	A10.3:104
same. 1901. p. 87 .....	A10.3:119
Irrigation methods in orchards. 1900. p. 91.....	A10.3:76
McCormack, H. See, as joint author, Grindley, H. S.	
McDonnell, Henry Barnett. See, as joint author, Frear, William.	
McElroy, Karl P.:	
Sorghum-sugar experiments at Ness City, Kans. 1889. p. 81 ...	A7.3:26

	<b>Index</b>
	Classification no.
McElroy, Karl P.—Continued	
Vegetables, canned, report on, with collaboration of W. D. Bigelow. 1893. p. 1015 .....	A7.3:13 <sup>a</sup>
See also, as collaborator, Wiley, Harvey Washington.	
McFarland, Byron. Thunderstorm; new explanation of one of its phenomena. 1901. p. 297 .....	A29.6:29
McGann, Edward W. Meteorological statistics, how to improve them to meet the needs of medical profession, etc. 1899. p. 80 .....	A29.3:24
McGehee, John M.:	
Swine diseases, special report no. 12, review of. 1879. p. 89 ....	A1.6:22
Swine plague in Florida. 1880. p. 94 .....	A1.6:22
McGrew, T. F.:	
Fowls, American breeds of. p. 513 .....	A4.1:901
Plymouth Rocks (American breeds of fowls, 1). 1901 .....	A4.3:29
Wyandotte (American breeds of fowls, 2). 1901 .....	A4.3:31
Machen, August W.:	
Remarks of, at 2d convention of Weather Bureau officials, Milwaukee, Wis. 1901. p. 230 .....	A29.3:31
Rural free mail delivery in relation to road improvement. 1901. p. 92 .....	A22.3:21
Machinery designed for destruction of cotton worm, experimental tests of (Barnard). 1883. p. 39 .....	A9.3:3
See also Agricultural machinery—Farm implements and machinery.	
McKeown, S. W. Milk or cream, butter fat in, method of determining by difference. 1894. p. 194 .....	A7.3:43
McKerrow, George. Wisconsin, farmers' institute work accomplished in. 1902. p. 31 .....	A10.3:120
Mackie, Simon F. Great Salt Lake, level of, relation between, and rainfall. 1901. p. 57 .....	A29.6:29
McKinley, William, resolutions on death of, at International Good Roads Congress held at Buffalo, N. Y., Sept. 16-21, 1901. p. 16 .....	A22.3:21
McKinney, H. G. Water supply, notes on experience of other countries in administration of their. 1891. p. 261 .....	A15.2:P94 <sup>1</sup>
McLain, Nelson W.:	
Apiculture, experiments in—	
1885. p. 333 .....	A1.1:885
1886. p. 583 .....	A1.1:886
1887. p. 170 .....	A1.1:887
1887. p. 66 .....	A9.3:13
McLain, Thomas. Sisal hemp industry in Bahama Islands. 1891. p. 52 .....	A11.5:3
McLaren, Dice. Grass stations, cooperative, in West and Southwest. p. 344 .....	A1.1:891
Same, p. 344 .....	A6.1:891
McLean, L.:	
Anthrax among cattle in the Northwest. 1881. p. 311 .....	A1.6:34
Anthrax in New Mexico, outbreak of. 1881. p. 317 .....	A1.6:34
Foot-and-mouth disease, nonexistence of, in the West. 1881. p. 319 .....	A1.6:34
McLean, L.; Miller, Wm. B. E.; Michener, Ch. B.; Horr, Thomas J.; Hauk, James W.; Roland, H. Whitfield. Animals in New York and Brooklyn, contagious diseases of, preliminary report of inspectors in investigation of. 1884. p. 19 .....	A1.7:6
Macleod, Leslie E. Horse, national, of America. p. 691 .....	A1.1:887
MacMillan, Conway. Minnesota species of isariah and attendant pachybasium, note on. 1891. p. 75 .....	A28.5:6
McMurtrie, William:	
Chemical memoranda, monthly, Jan., 1873, to Dec., 1876 .....	A27.9:
[The more important articles are indexed under their various subjects.]	
Grape culture and wine production in U. S. for 1880, report on statistics of .....	A1.6:36
Raw silks, examination of. 1883. p. 56 .....	A9.3:3
Sugar beet, culture of, preliminary report on, near Portland, Maine. 1879. p. 171 .....	A1.6:28
same, final report on, in New England. 1879. p. 181 .....	A1.6:28



# Index

	Classification no.
<b>McMurtrie, William—Continued</b>	
Sugar beet, culture of, and manufacture of sugar therefrom in France and United States. 1880.....	A1.6:28
Sumac, culture of, in Sicily, 1880 .....	A1.6:26
Wine, production of, mineral nutrition of vine for. 1882. p. 180.	A1.8:22
Wools and other animal fibers, examination of. 1886.....	A1.2:W88
<i>See also</i> , for reports as Chemist, Chemistry Bureau, Agriculture Department, 1873-1877 .....	A7.1:
<b>McNamee, James.</b> Address of, before convention of National League for Good Roads, Washington. 1893. p. 76 .....	A10.3:14
<b>McNeely, J. F. M.</b> Live-stock industry, condition of, of Colorado and Wyoming. p. 425.....	A4.1:889-90
<b>McNeely, John T.</b> Cattle industry of Colorado, Wyoming, and Nevada, and sheep industry of Colorado in 1897. p. 377 .....	A4.1:898
<b>McNutt, J. N.</b> Swine-plague in Jefferson Co., Mo. 1879. p. 173 ..	A1.6:12
<b>McPherson, William.</b> <i>See</i> , as joint author, Weber, Henry Adam.	
<b>McQueen, Asa N.</b> Anthrax in Louisiana in 1896. p. 176 .....	A4.1:897
<b>Macrae, A. S.</b> Potato-flour or farina. p. 390.....	A1.1:875
<b>McWhirter, Professor.</b> Agricultural and industrial education, paper relative to. 1885. p. 105.....	A1.7:9
<b>Madagascar:</b>	
Meteorology in, note on (Abbe). 1901. p. 375.....	A29.6:29
Spider in, poisonous. 1890. p. 273.....	A9.7:2
<b>Madder:</b>	
Dyer's culture of (Newton). 1866. p. 94.....	A27.9:4
Properties and uses, etc. (Dodge). p. 339.....	A1.1:865
Smyrna, culture of (Smith). 1870. p. 284.....	A27.9:8
<b>Maddock, Miss Blanche.</b> Women's farm institutes. 1902. p. 46 ..	A10.3:110
<b>Madeira:</b>	
Egg exports from (Jones). p. 520.....	A4.1:900
Kite work in, notes on (Abbe). 1898. p. 552.....	A29.6:26
<b>Madison County, Ohio,</b> cattle sales. p. 371.....	A1.1:869
<b>Madras, India,</b> rainfall in, and frequency of sun spots (Subha Rao). 1902. p. 438 .....	A29.6:30
<b>Maercker, M.</b> German agricultural experiment stations, aims and tendencies of. 1898. pp. 103, 207 .....	A10.6:9
<b>Magnesia,</b> relation to plant growth, experimental study of (May). 1901. p. 37 .....	A19.3:1
<b>Magnetic declination,</b> discovery of, made by Christopher Columbus (Bertelli). 1895. p. 486.....	A29.3:11 <sup>2</sup>
<b>Magnetic field.</b> <i>See</i> Terrestrial magnetic field.	
<b>Magnetic instruments,</b> some improvements in. 1895. p. 539.....	A29.3:11 <sup>2</sup>
<i>See also</i> Earth-magnetic instruments.	
<b>Magnetic needle,</b> secular change in direction of, its cause and period (Littlehales). 1894. p. 174 .....	A29.3:11 <sup>1</sup>
<b>Magnetic observations:</b>	
Coordinate axes for magnetic and meteorological observations, standard system of (Bigelow). 1897. p. 201.....	A29.6:25
New method for discussion of (Harrington). 1892.....	A29.3:2
<i>See also</i> Meteorological observations.	
<b>Magnetic rocks and lightning,</b> note on (Abbe). 1897. p. 352.....	A29.6:25
<b>Magnetic survey:</b>	
Europe and Asia (Tillo). 1895. p. 465.....	A29.3:11 <sup>2</sup>
North America (Schott). 1895. p. 460.....	A29.3:11 <sup>2</sup>
<b>Magnetism.</b> <i>See</i> Meteorology and magnetism—Solar magnetism—Terrestrial magnetism.	
<b>Magnolia Station, Lawrence, La:</b>	
Manufacture of sugar at, experiments in (Spencer)—	
1886. p. 328 .....	A1.1:886
1885-6 .....	A7.3:11
1886-7 .....	A7.3:15
1888. p. 29 .....	A7.3:18
1889 .....	A7.3:21
Sugar and sugar cane data for 4 years at, summary of (Spencer). 1887. p. 46 .....	A7.3:18
<i>See also</i> Lawrence, La.	
<b>Magruder, Wm. T.</b> Agricultural engineer. 1900. p. 103.....	A10.3:76



<b>Mahany, Michael</b> , short biography of (Abbe). 1898. p. 550 .....	A29.6:26
<b>Mails.</b> <i>See</i> Rural free delivery.	
<b>Maine:</b>	
Agriculture of, some outlines of (Boardman). p. 39 .....	A1.1:862
Beet-sugar in (Blackwell). 1883. No. 61. p. 26 .....	A27.9:21
Climate, soil, physical resources, and agricultural capabilities of, with special reference to occupation of its new lands (Boardman). 1884.....	A1.7:4
Corn canning in (Boardman). 1886. p. 554.....	A27.9:24
Farm resources and products of. 1868. p. 4 .....	A27.9:6
Road improvement in, address on (Stone). 1897 .....	A22.4:28
Starch factories in, report on (Boardman). 1885. No. 19. p. 23.	A27.9:23
Starch manufacture in. 1886. p. 22.....	A27.9:24
<i>See also</i> Aroostook County — Portland — Sebago Lake.	
<b>Maine State College.</b> Dietary studies at, in 1895 (Jordan).....	A10.3:37
<b>Maize or Indian corn:</b>	
Carbohydrates of (Stone). 1896 .....	A10.3:34
Composition of, including grain, meal, stalks, pith, fodder, and cobs (Wiley). 1898 .....	A7.3:50
same (French abstract). 1900.....	A7.4:6
Culture of (Wolfinger). p. 215.....	A1.1:866
Food value of (Wiley). p. 17.....	A1.8:49
In manufacture of beer (Wahl).....	A1.8:52
Industry in U. S. (Snow). p. 23 .....	A1.8:49
Introduction of, into Europe (Murphy). 1891. p. 5.....	A1.8:49
Sorghum and, as sugar plants, report on. p. 228.....	A1.1:877
Use of, in Europe, and possibilities of its extension. 1892.....	A1.8:49
Use of, in Mexico. 1893. p. 256.....	A27.9:31
Xenia, or immediate effect of pollen, in (Webber). 1900 .....	A28.3:32
<i>See also</i> Corn.	
<b>Maize and sorghum sugars</b> , manufacture of, circular relative to (Le Duc). 1879 .....	A1.8:15
<b>Maize-paper and maize-cloth</b> (Dodge). p. 436.....	A1.1:863
<b>Mal de caderas</b> , note on. p. 154.....	A4.1:901
<b>Mal di goma.</b> <i>See</i> King, William Rice.	
<b>Maladie du coit:</b>	
Extirpation of, in Nebraska and South Dakota (Faville). p. 62..	A4.1:893-4
Second outbreak of, in Nebraska (Faville and Day). p. 134.....	A4.1:899
Supposed, among horses in Nebraska (Faville). p. 359 .....	A4.1:891-2
<b>Malaga, Spain</b> , muscatel raisins in, production of (Mark). 1875. p. 319 .....	A27.9:13
<b>Malanesia.</b> <i>See</i> Australasia.	
<b>Malay Archipelago</b> , climate of (Van der Stok). 1896. p. 669 .....	A29.3:11 <sup>a</sup>
<i>See also</i> Australasia.	
<b>Malignant edema.</b> <i>See</i> Blood poisoning.	
<b>Mallein</b> , distribution of. 1899. p. 532.....	A4.1:899
<b>Mallet, John William:</b>	
Creatin and creatinin, physiological effect of, and their value as nutrients. 1899 .....	A10.3:66
Nitrogen of proteids, and that of simpler amids or amido-acids, investigation of analytical methods for distinguishing between. 1898 .....	A7.3:54
<b>Mallophaga or bird-lice</b> , affecting man and lower animals (Osborn). 1891 .....	A9.3:7
<b>Mallophaga:</b>	
Development in, note on period of (Osborn). 1890. p. 115.....	A9.7:3
Parasitic habit in, origin and development of (Osborn). 1891. p. 187 .....	A9.7:4
<b>Mally, C. W.</b> , fruit seriously injured by moths. 1902. p. 90.....	A9.6:31
<i>See also</i> , as joint author, Lounsbury, Charles P. — Webster, Francis M.	
<b>Mally, Frederick W.:</b>	
Boll worm of cotton, report of progress in supplementary investigation of this insect—	
1891 .....	A9.3:24
1892. p. 45 .....	A9.3:26
1893 .....	A9.3:29

# Index

	Classification no.
<b>Mally, Frederick W.—Continued</b>	
Mexican cotton-boll weevil. 1901 .....	A1.9:130
Monostegia ignota, report on. 1890. p. 9 .....	A9.7:3
Strawberry saw-fly, another. 1889. p. 136 .....	A9.7:2
<b>Malt liquors:</b>	
Adulteration of (Crampton). 1887. p. 263 .....	A7.3:13 <sup>s</sup>
American, composition of, and the substances used in their adulteration (Crampton). p. 183 .....	A1.1:887
Consumption of, in U. S., per capita of population—	
1870-1895. p. 552 .....	A1.10:895
1896. p. 595 .....	A1.10:896
1898. p. 723 .....	A1.10:898
<i>See also</i> Liquors.	
<b>Malta:</b>	
Animals and animal products in (Grout). p. 520 .....	A4.1:898
Weather and storms of, during October, 1898 (Grout). p. 546 .....	A29.6:26
<b>Mammalogy and ornithology of New England, with reference to agricultural economy (Samuels). p. 265 .....</b>	<b>A1.1:863</b>
<b>Mammalogy Division. <i>See</i> Ornithology and Mammalogy Division, Agriculture Department.....</b>	<b>A5.1:</b>
<b>Mammals:</b>	
Bounties on, circular in relation to. n. d. ....	A5.4:19
Economic relations of, circular on. 1886 .....	A5.4:3
Food habits and distribution of, in parts of Minnesota and Dakota (Bailey). p. 426 .....	A1.1:887
same, p. 426 .....	A5.1:887
North American—	
descriptions of fourteen new species and one new genus of (Merriam). 1889 .....	A5.5:2
descriptions of new genus and two new species (Merriam). p. 115 .....	A5.5:5
descriptions of twenty-six new species of (Merriam). 1890 .....	A5.5:4
Small, directions for measurement of (Merriam). 1889 .....	A5.4:11
<i>See also</i> Tres Marias Islands, Mexico — Yukon region.	
<b>Mammitis. <i>See</i> Cows.</b>	
<b>Man:</b>	
Conflict of, with climate, notes on (Abbe). 1899. p. 257 .....	A29.6:27
Food and nutrition of, list of publications on .....	A10.2:F73
<i>See also</i> Plants.	
Lucilia nobilis parasitic on (Meinert). 1892. p. 36 .....	A9.7:5
Pediculi and mallophaga affecting lower animals and (Osborn). 1891 .....	A9.3:7
<i>See also</i> Climate and man.	
<b>Man-infesting bot, abstract of paper on (Matas). 1888. p. 76 .....</b>	<b>A9.7:1</b>
<b>Manchester, England:</b>	
Butter market (Ashby). p. 201 .....	A4.1:899
Market for American products .....	A12.4:8
<b>Manderson, Charles F. Address of, before convention of National League for Good Roads, Washington. 1893. p. 11 .....</b>	<b>A10.3:14</b>
<b>Manila, Philippine Islands:</b>	
Note on weather of (Phillips). 1898 .....	A29.3:22
Weather normals for 1865-98 (Abbe). p. 119 .....	A29.6:29
Weather of, report on (Phillips). 1899. p. 321 .....	A29.1:898
<b>Manila hemp plantain, note on. 1872. p. 365 .....</b>	<b>A27.9:10</b>
<b>Manitoba:</b>	
Crop report. 1890. p. 485 .....	A27.9:28
Crops and live stock in. 1894. p. 421 .....	A27.9:32
<b>Mannheim, Germany, cost of hauling farm products over wagon roads at (Goldfinger). p. 9 .....</b>	<b>A22.4:27</b>
<b>Manning, James Alexander. London, wastes of, method of disposing of. 1872. p. 379 .....</b>	<b>A27.9:10</b>
<b>Manson, Marsden. Yuba River, California, features and water rights of. 1901. p. 115 .....</b>	<b>A10.3:100</b>
<b>Mantis egg parasites, genus of. 1892. p. 242 .....</b>	<b>A9.7:4</b>
<b>Manual training, practical importance of (Gilkison). 1900. p. 96 .....</b>	<b>A10.3:76</b>
<b>Manual training and apprentice system (Richards). 1894. p. 73 .....</b>	<b>A10.3:20</b>
<b>Manufacturing conditions and resources of U. S. (Newton). 1862 .....</b>	<b>A1.8:1</b>

**Manures:**

- Chemical, note on. 1869. p. 300..... A27.9:7  
 Fertilizing value of manure from cows. 1899. p. 5..... A1.9:97  
 Great Britain. 1868. p. 38..... A27.9:8  
 Green manuring and (Wolfinger). p. 299..... A1.1:864  
 Greensand marl as. 1867. p. 368..... A27.9:5  
     same, p. 30..... A27.9:6  
 Mineral, present theory and practice of. p. 428..... A1.1:870  
 Potash as. 1870. p. 287..... A27.9:8  
*See also* Barnyard manure—Chemical manures—Farm manure—  
 Fertilizers—Moule's earth-closet system—Stable manure.

- Manures, and how to apply them. 1868. p. 93..... A27.9:6  
 Manures and their application (Brown and Reynolds). p. 368..... A1.1:865

**Manuring:**

- Cotton (White). 1896. p. 169..... A10.3:33  
     same (White). 1897..... A1.9:48  
 Experiments in. 1867. p. 55..... A27.9:5  
 Green, leguminous plants for (Allen). 1894..... A1.9:16  
*See also* Liquid manuring—Soils.

**Maple sugar:**

- Manufacture of (Alvord). p. 394..... A1.1:862  
 Production of, in United States and Canada (Hough). 1884. p. 394. A13.5:4  
 Table showing amount of, June, 1864. No. 3. p. 8..... A27.9:2  
*See also* Sugar industry of United States.

**Maple:**

- North American (Vasey). 1875. p. 313..... A27.9:13  
 Pulvinarias on, two most abundant (Howard). 1900. p. 7..... A9.6:22  
 Maple pseudococcus, report on (Howard). 1894. p. 235..... A9.7:7  
 Maple sirup and sugar (Langworthy). 1901. p. 21..... A1.9:124  
 Maps, chalk-plate, note on (Abbe). 1899. p. 311..... A29.6:27  
*See also* Weather maps.

- Marbles of Rutland County, Vermont (Dorr). p. 448..... A1.1:862

**Marbury, John B.:**

- Climate and crop service weekly bulletins, should remarks of cor-  
 respondents be published? should weekly reports of tempera-  
 ture and rainfall be telegraphed from voluntary stations?  
 1899. p. 108..... A29.3:24

- Weather-forecast stations, voluntary, river and cotton-belt, estab-  
 lishment and inspection of. 1899. p. 150..... A29.3:24

- Weather forecasts, verification of. 1902. p. 156..... A29.3:31

- March, weather conditions for, statement of average (Garriott). p. 117. A29.6:29

- Mardela Springs, Md., frosts in May at (Abbe). p. 172..... A29.6:23

- Marean, Herbert W., soil survey of Covington area, Georgia. p. 329. A26.5:901<sup>1</sup>  
*See also*, as joint author, Burke, R. T. Avon.

- Marean, Ralph B. Mist, small whirling columns of. 1899. p. 409. A29.6:27

**Mares:**

- Abortion in, outbreak of (Kilborne). 1893. p. 49..... A4.3:3

- Infectious abortion of (Williams). p. 449..... A4.1:889-90

- Vagina of, pathogenic bacillus from, after abortion (Smith). 1893.  
 p. 53..... A4.3:3

- Marine Meteorology, Division of, in Hydrographic Office, Navy De-  
 partment, origin and work of (Beehler). 1895. p. 221..... A29.3:11<sup>2</sup>

- Marine nephoscope and its usefulness to navigator (Abbe). 1894.  
 p. 161..... A29.3:11<sup>1</sup>

*See also* Nephoscope.

- Marine plants, uses of, with a brief account of curing of Irish moss  
 (Bates). p. 423..... A1.1:866

**Maring, Delos T.:**

- Sunshine recorder, improved, report on. 1897. p. 485..... A29.6:25

- Weather Bureau exhibit at Pan-American Exposition, Buffalo,  
 N. Y. 1901. p. 259..... A29.6:29

- Maritime species of Coccidæ (Cockerell). 1894. p. 42..... A9.7:7

- Mark, John A. Muscatel raisins, production of, in Malaga. 1875.  
 p. 319..... A27.9:13

- Market, stock hogs for. p. 101..... A4.1:893-4

- Market-garden crops, nitrogenous fertilizers for (Smith). 1901. p. 12. A1.9:124

- Market gardening in vicinity of New York (Henderson). p. 243... A1.1:865

# Index

	Classification no.
Market milk, plan for its improvement (Pearson). p. 158.....	A4.1:900
Market products of west New Jersey (Lippincott). p. 249.....	A1.1:865
Market quotations and farm prices. 1893. p. 485 .....	A27.9:31
same. 1894. p. 732 .....	A27.9:32
Market systems of the country, their uses and abuses. p. 241 .....	A1.1:870
Marketing farm produce (Hill). 1897.....	A1.9:62
Markets, world's, for American products.....	A12.3:
<i>See also Foreign markets.</i>	
Marl region of Virginia. p. 389.....	A1.1:868
Marlatt, Charles Lester:	
Arsenicals, new and old, comparative tests with, on foliage and with larvæ. 1896. p. 30.....	A9.6:6
Asiatic ladybird, importation and present status of, preliminary report on. 1902. p. 70 .....	A9.6:37
Aspidiotus ostreæformis, account of, 1899. p. 76 .....	A9.6:20
Bedbug and cone-nose, report on. 1896. p. 32.....	A9.6:4
Bedbugs, circular on. 1902.....	A9.5:47
Buffalo gnats, report of trip to investigate. 1889. p. 7.....	A9.7:2
Buffalo tree-hopper—	
circular on. 1897 .....	A9.5:23
report of. 1894. p. 8.....	A9.7:7
Cicada, periodical—	
account of Cicada septendecim, its natural enemies and means of preventing its injury, with summary of distribution of different broods. 1898 .....	A9.6:14
broods of, new nomenclature for. 1902.....	A9.5:45
consideration of validity of old records bearing on distribution of broods of, with particular reference to occurrence of broods VI and XXIII in 1898. 1898. p. 59.....	A9.6:18
new nomenclature for broods of. 1898. p. 52 .....	A9.6:18
Clover mite, circular on. 1897.....	A9.5:19
Coccinellidæ, scale-feeding, predatory insects which affect useful- ness of. 1902. p. 84.....	A9.6:37
Cockroaches, report on. 1902.....	A9.5:51
Cockroaches and house ants, report on. 1896. p. 84.....	A9.6:4
Codling moth, double-brooded, report on. 1894. p. 248.....	A9.7:7
Currant stem-girdler, report on. 1894. p. 296.....	A9.7:6
same. 1895. p. 387 .....	A9.7:7
Elm leaf-beetle—	
imported, circular on. 1895 .....	A9.5:8
in Washington, D. C. 1895. p. 47.....	A9.6:2
Grape, principal insect enemies of—	
1895. p. 385.....	A1.10:895
1898 .....	A1.9:70
1900. p. 27 (excerpt).....	A1.9:118
Hessian fly, circular on .....	A9.5:12
Hibernation of chinch bug. 1894. p. 232.....	A9.7:7
House ants, circular on. 1898 .....	A9.5:34
House centipede, circular on. 1902 .....	A9.5:48
Insect control in California. 1896. p. 217.....	A1.10:896
Insecticide experiments, some. p. 33 .....	A9.6:30
Insecticide soaps, report on. 1896. p. 38 .....	A9.6:6
Insecticides, important directions for their preparation and use ..	A1.9:19
same, revised. 1901 .....	A1.9:127
Insecticides, notes on—	
1894. p. 115 .....	A9.7:7
1895. p. 19 .....	A9.6:2
1897. p. 54 .....	A9.6:9
1898. p. 94 .....	A9.6:17
Insects, injurious, methods of controlling, with formulas for insect- icides. 1894. p. 572.....	A1.10:894
same. 1895. p. 580 .....	A1.10:895
Laisser-faire philosophy applied to insect problem. 1899. p. 5..	A9.6:20
Locust, lesser migratory, report on. 1889. p. 66 .....	A9.7:2
Nematinæ of North America, a subfamily of leaf-feeding hyme- noptera of family Tenthredinidæ. 1896.....	A9.8:3
Ox warble, circular on. 1897.....	A9.5:25

**Marlatt, Charles Lester—Continued**

Paris green, notes on. 1895. p. 408 .....	A9.7:7
Peach-tree borer, circular on. 1896 .....	A9.5:17
Peach twig-borer—	
an important enemy of stone fruits. 1898 .....	A1.9:80
report on. 1898. p. 7 .....	A9.6:10
Pear slug, circular on. 1897 .....	A9.5:26
Pear-tree psylla, circular relative to. 1895 .....	A9.5:7
Pear-tree psylla in Maryland. 1894. p. 175 .....	A9.7:7
San Jose scale—	
experiments with winter washes against, season of 1894-95.	
1895. p. 365 .....	A9.7:7
how to control .....	A9.5:42
in Japan, preliminary report on. 1902. p. 41 .....	A9.6:31
native home of, résumé of search for, in Japan and China.	
1902. p. 65 .....	A9.6:37
Scale insect and mite enemies of citrus trees. 1900. p. 247 ....	A1.10:900
Scale insects, temperature control of. 1899. p. 73 .....	A9.6:20
Silver fish, circular on. 1902 .....	A9.5:49
Sweet potato saw-fly, new. 1892. p. 24 .....	A9.7:5
True clothes moths, circular on. 1898 .....	A9.5:36
Wheat, growing, principal insect enemies of. 1901 .....	A1.9:132
White ant, circular on. 1902 .....	A9.5:50
White ant, species injurious to wall paper, books, timbers, etc.	
1896. p. 70 .....	A9.6:4
Woolly aphis of apple. 1897 .....	A9.5:20
Xanthium trypetæ, report on. 1891. p. 312 .....	A9.7:3
See, for report as acting Chief, Entomology Division. 1902 .....	A9.1:
See also, as joint author, Howard, Leland Ossian — Riley, Charles Valentine.	
<b>Marls:</b>	
Chemical examination of (Brown). 1872. p. 307 .....	A27.9:10
Chemical memoranda on (Brown). 1872. p. 371 .....	A27.9:10
Greensand, as manure. 1867. p. 368 .....	A27.9:5
same. p. 30 .....	A27.9:6
Marmot, new, from Black Hills of Dakota, description of (Merriam).	
1889. p. 7 .....	A5.5:2
<b>Mars:</b>	
Notes on earth and (Abbe). 1900. p. 543 .....	A29.6:28
People of (Talman). 1900. p. 537 .....	A29.6:28
Marsh, George Perkins. Irrigation, evils, remedies, and compensa-	
tions of. p. 362 .....	A1.1:874
[Also issued as 43d Cong., 1st session, S. mis. doc. 35, serial no. 1584.]	
Marsh hawk, report on (Fisher). p. 370 .....	A1.1:889
Same, p. 370 .....	A5.1:889
Marsh hay, salt and fresh water (Allen). p. 296 .....	A1.1:876
Marsh lands, reclamation of (Collins). p. 600 .....	A1.1:870
See also Salt marsh lands.	
Marsh or pond pine, observations on (Roth). 1897. p. 169 .....	A13.3:13 <sup>2</sup>
Marsh soils. See Soils.	
Marshall County, Kansas, cattle disease in (Steddom). p. 382 .....	A4.1:898
<b>Marten, John:</b>	
Hessian fly, life history of, new notes on. 1891. p. 265 .....	A9.7:3
Rocky Mountain locust in 1880, report on. 1883. App. p. 50 ....	A8.1:3
Marten, new ( <i>Mustela caurina</i> ), from northwest coast region of U. S.	
description of (Merriam). 1890. p. 27 .....	A5.5:4
Martin, F. O. See, as joint author, Mooney, Charles N.	
Martin, George A. Chicago horse show of 1890. 1891. p. 349 .....	A4.1:889-90
Martin, J. O., soil survey of Willis area, Texas. p. 607 .....	A26.5:901 <sup>1</sup>
See also, as joint author, Smith, William G.	
<b>Martinique, West Indies:</b>	
Customs tariff in. 1893. p. 209 .....	A27.9:31
Cyclone of Aug. 18, 1891. p. 185 .....	A29.6:19
Eruption at, meteorological conditions following (Kimball).	
1902. p. 267 .....	A29.6:30
Weather service, establishment of (Kimball). 1901. p. 512 ....	A29.6:29
See also Pelee, Mount.	

# Index

	Classification no.
<b>Marvin, Charles Frederick:</b>	
Address as chairman, section of instruments and exposure, before second convention of Weather Bureau officials, held at Milwaukee, Wis., Aug. 27, 28, 29, 1901. 1902. p. 212 .....	A29.3:31
Aerial observers, instructions for. 1898 .....	A29.11:K
Anemometer tests, report on. 1900. p. 58 .....	A29.6:28
Anemometry, general information respecting theory and operation of typical instruments for indicating and measuring and automatically recording wind movement and direction, etc ...	A29.11:D
Aneroid barometer, report on. 1898. p. 410 .....	A29.6:28
Barometer readings, metric and English, erroneous conversion of. 1898. p. 302 .....	A29.6:26
Barometers and measurement of atmospheric pressure .....	A29.11:F
Cloud observations and an improved nephoscope. 1896. p. 9 ...	A29.6:24
Cyclones, development and movement of. 1892 .....	A29.2:C99
Earthquake of Oct. 31, 1895, report upon. p. 374 .....	A29.6:23
Kite experiments at Weather Bureau. 1896. pp. 113, 156, 199, 238 .....	A29.6:24
Kites, mechanics and equilibrium of. 1897. p. 196 .....	A29.6:25
Kites, use of, in exploration of upper air. p. 201 .....	A1.10:898
Moisture tables. 1898. p. 205 .....	A29.6:26
National Bureau of Standards, circular of information relating to. 1902. p. 135 .....	A29.6:30
Precipitation, measurement of .....	A29.11:E
Psychrometric tables for vapor pressure, relative humidity, and temperature of dew-point. 1900 .....	A29.2:P95
Rainfall, charting of, note on. 1902. p. 214 .....	A29.6:30
Recording instruments, instructions for obtaining and transcribing .....	A29.11:A
Seismic changes caused by building operations. 1899. p. 582 ...	A29.6:27
Seismograph, Marvin, report on. 1895. p. 250 .....	A29.6:23
Signals, Weather Bureau. 1892. p. 41 .....	A29.3:7
Sunshine, measurement of, and preliminary examination of Angström's pyrheliometer. 1901. p. 454 .....	A29.6:29
Sunshine recorders, care and management of. 1896 .....	A29.11:G <sup>2</sup>
Thermometers, sluggishness of. 1899. p. 458 .....	A29.6:27
Weather Bureau instruments, description of—	
1893. p. 19 .....	A29.1:891 <sup>3</sup>
1894. p. 17 .....	A29.1:893 <sup>2</sup>
1895. p. 14 .....	A29.1:894
1896. p. 8 .....	A29.1:896
Weather Bureau kite, report on. 1896. p. 418 .....	A29.6:23
<b>Marvin, Charles Frederick, and Whitney, Milton:</b>	
Soil thermometers, maximum and minimum, combined, instructions for use of. 1894 .....	A29.11:G
Thermometers, maximum and minimum radiation, instructions for use of. 1894 .....	A29.11:H
<b>Marvin, Paul.</b> See, as joint author, Kastle, Joseph Hoeng.	
Marvin's weighing rain and snow gauge (Carlisle). 1899. p. 131 ..	A29.3:24
Same, instructions for using .....	A29.11:E
<b>Marx, Charles D.</b> Irrigation problems in Salinas Valley, Cal., report on. 1901. p. 193 .....	A10.3:100
<b>Marx, George.</b> See, for reports as Chief, 1890-93, Illustrations Division, Agriculture Department.	
<b>Maryland:</b>	
Army worm and some other insects affecting grain in, outbreak of (Ashmead). 1890. p. 53 .....	A9.7:3
Climatological studies (Fassig). 1902. p. 200 .....	A29.3:31
Cold weather in March in, records of 1823-94 (Acworth). p. 126 ..	A29.6:22
Entomological notes from (Johnson). 1896. p. 63 .....	A9.6:6
Farm resources and products of. 1868. p. 63 .....	A27.9:6
Farmers' institute work accomplished in (Amoss). 1902. p. 25 ..	A10.3:120
Insects, principal injurious, of year (Johnson). 1897. p. 80 ....	A9.6:9
same (Johnson). 1898. p. 92 .....	A9.6:17
Live-stock interests of (Patterson). p. 254 .....	A4.1:886
same (Patterson). p. 466 .....	A4.1:887-8



**Maryland—Continued**

- Orchard injuries by red-legged flea-beetle (Schwarz). 1893. p. 334..... A9.7:5
- Pear-tree psylla in (Marlatt). 1894. p. 175..... A9.7:7
- Pleuro-pneumonia among cattle in, investigation of (Rose). p. 51. A1.1:881-2
- Resources of, notes on. 1875. p. 378..... A27.9:13
- Road improvement in, extract from governor's message (Lowndes). p. 4..... A22.4:33
- San Jose scale in, experiments with lime, salt, and sulphur wash against (Quaintance). 1902. p. 37..... A9.6:37
- Southern cattle fever in, outbreak of (Curtice). p. 429..... A4.1:887-8
- Swine plague in, outbreak of (Rose). p. 446..... A4.1:884
- Weather service, 1st report, notes on (Abbe). 1899. p. 472.... A29.6:27
- See also* Calvert County—Cecil County—College Station—Harford County—Kent County—Mardela Springs—Montgomery County—Prince George County—St. Mary County.
- Maryland farm (Bryan farm), birds of (Judd). 1902..... A5.3:17
- Masaya, Nicaragua, rainfall of (Henry). 1898. pp. 162, 305..... A29.6:26
- Maslin, E. W. Figs, production and importation of, statistics of. 1901. p. 288..... A20.3:9
- Mason, Frank H.:**
- Animals, dead, disposition of, in Berlin. p. 349 (erroneously printed "Frank W.")..... A4.1:899
- Dogs, muzzling of, in Germany and Great Britain. p. 521..... A4.1:900
- Dried apples, American, in Germany. 1895. p. 15..... A7.3:48
- Frankfort-on-the-Main, Germany, cost of hauling farm products over wagon roads at. p. 5..... A22.4:27
- Leather manufactures in Germany. p. 522..... A4.1:899
- Massachusetts:**
- Brown-tail moth in, report on (Kirkland). 1900. p. 75..... A9.6:26
- Coccidæ, notes on some (Cooley). 1898. p. 61..... A9.6:17
- Farm resources and products of. 1868. p. 7..... A27.9:6
- Gypsy moth in—
- notes on (Fernald). 1895. p. 59..... A9.6:2
- report upon, 1891 (Henshaw). p. 75..... A9.3:26
- Insects in, 1901 (Fernald). 1902. p. 119..... A10.3:115
- Porthetria dispar in, introduction and spread of, and efforts made by State to repress and exterminate it (Howard). 1897..... A9.6:11
- Road laws and road building in (Ross). 1901. p. 34..... A22.3:21
- State highways in, 1894 (Perkins). p. 505..... A1.10:894
- See also* Blue Hill—Boston—Milton—Northfield—Springfield—West Newbury.
- Massee, George:**
- Mycological notes. 1889. p. 184..... A28.5:5
- same, continued. 1892. p. 178..... A28.5:6
- Masterson, William W.** Somali or black-head sheep. p. 522..... A4.1:898
- Matas, Rudolph.** Man-infesting bot, abstract of paper on. 1888. p. 76..... A9.7:1
- Mathematical analysis as applied to terrestrial magnetism, present condition of (Schuster). 1895. p. 550..... A29.3:11<sup>2</sup>
- Mathematics and meteorology, notes on (Abbe). 1898. p. 267..... A29.6:26
- Same (Abbe). 1900. p. 548..... A29.6:28
- Matsumura, M. Japanese insects injurious to fruit, two. 1898. p. 36. A9.6:10
- Matter and energy. *See* Metabolism.
- Matthews, Albert. "Indian summer." 1902. pp. 19, 69..... A29.6:30
- Mauritius:**
- Cyclone of Dec. 5, 1897 (Claxton). p. 62..... A29.6:26
- Icerya, probable origin in (Riley). 1887. p. 27..... A9.3:15
- Meteorological Society of, notes on (Kimball). 1901. p. 565.... A29.6:29
- Meteorology and crops, note on (Abbe). 1897. p. 354..... A29.6:25
- Royal Alfred Observatory, thunderstorms at (Claxton). 1900. p. 63..... A29.6:28
- Weather and sugar crop in, 1880-96 (Abbe). p. 412..... A29.6:26
- Maurice, Professor.** What an agricultural college ought to be. 1885. p. 108..... A1.7:9
- Maxillary tentacles of pronuba (Smith). 1893. p. 161..... A9.7:5

# Index

Classification no.

## Maxwell, Walter:

- Hawaiian Islands, agriculture in, etc. 1898. p. 563..... A1.10:898
- Hawaiian soils, estimation of lime, potash, and phosphoric acid in. 1898. p. 63..... A7.3:56
- Irrigation in Hawaii, report on. 1900..... A10.3:90
- Sorghum-sugar experiments at Morrisville, Va. 1889. p. 63.... A7.3:28
- Sugar-beet culture in France and Germany, notes on. 1890. p. 81. A7.3:30
- Sugar-beet experiment station at Schuyler, Nebr., annual report of. 1891. p. 118..... A7.3:33
- same, 2d. 1892. p. 43..... A7.3:37
- same, 3d. 1894. p. 37..... A7.3:39
- Vegetable organisms, fatty bodies in, report on methods of estimation of. 1890. p. 94..... A7.3:28
- See also*, as collaborator, Wiley, Harvey Washington.

## May, David W.:

- Chemists, Official Agricultural Association of, 1900, convention of, report on. p. 503..... A10.6:12
- same, 1901. p. 406..... A10.6:13
- Plant growth, relation of lime and magnesia to, experimental study. 1901. p. 37..... A19.3:1
- Wheat, early plowing for. 1900. p. 7..... A1.9:122
- See also*, as joint author, Gibson, H. B.

## May, David W., and Beal, Walter Henry. Plants, leguminous, soil inoculation for. 1901. p. 7.....

A1.9:124

## May, weather condition for, statement of average (Garriott). p. 208. A29.6:29

## Maynard, S. T. Mildews upon plants under glass, treatment of. 1891. p. 16..... A28.5:6

## Mayo, N. S.:

- Texas fever of cattle, transmission of, by cattle tick. p. 481..... A4.1:898
- Texas itch among cattle in Kansas. p. 488..... A4.1:898
- Tuberculosis among cattle in Kansas. p. 479..... A4.1:898

## Mead, Elwood:

- Agricultural situation in California. 1901. p. 17..... A10.3:100
- Duty of water, general instructions to observers. 1899..... A10.8:2
- Irrigation—
- public control of. 1901. p. 680..... A1.10:901
- rise and future of, in U. S. 1899. p. 591..... A1.10:899
- what the Department of Agriculture is doing for. 1902..... A10.4:48
- Irrigation in U. S., testimony of, before United States Industrial Commission, June 11 and 12, 1901. 1901..... A10.3:105
- Irrigation investigations, discussion of. 1900. p. 15..... A10.3:86
- Irrigation investigations, for 1900, review of. 1902. p. 13..... A10.3:104
- Mississippi River, and tributaries, water from, abstract of laws for acquiring title to, with legal forms in use. 1899..... A10.3:60
- Reservoirs, some typical, in Rocky Mountain States. 1901. p. 415. A1.10:901
- Scope and purpose of irrigation investigations of Office of Experiment Stations. 1902. p. 417..... A10.1<sup>2</sup>:901
- Water rights on Missouri River and tributaries. 1899..... A10.3:58

## Meade, Kansas, sorghum sugar experiments at (Wiley). 1889..... A7.3:26

- Same (Fuelling). p. 79..... A7.3:26

## Meadow culture, Peterson's method of. 1874. p. 433..... A27.9:12

## Meadow lark and Baltimore oriole (Beale). 1895. p. 419..... A1.10:895

## Meadows and pastures, formation and cultivation in Middle Eastern States (Smith)..... A1.9:66

## Mealy bugs and their allies (Davis). 1894. p. 168..... A9.7:7

## Mealy bugs in greenhouses, experiments with hydrocyanic-acid gas as means of exterminating (Hemenway). 1900. p. 69..... A9.6:22

## Mealy-wing, cocoanut and guava, report of. 1893. p. 314..... A9.7:5

*See also* Orange mealy-wing.

## Means, Thomas Herbert:

- Salt marsh lands, reclamation of. 1901..... A26.4:8

### Soil survey in—

- Cache la Poudre Valley, Colorado. 1900. p. 121..... A1.8:64

- Salt River Valley, Arizona. p. 287..... A26.5:900<sup>1</sup>

- Sanpete, Cache, and Utah counties, Utah. 1900. p. 115..... A1.8:64

- Soils, soluble mineral matter of. 1898. p. 495..... A1.10:898

*See also*, as joint author, Whitney, Milton.

# Index

Classification no.

Means, Thomas Herbert, and Gardner, Frank Duane:	
Soil survey in Pecos Valley, New Mexico. 1900. p. 36 .....	A1.8:64
Soils of Pecos Valley, New Mexico. n. d. ....	A26.4:3
Means, Thomas Herbert, and Holmes, J. Garnett:	
Soil survey around Fresno, Cal. p. 333 .....	A26.5:900 <sup>1</sup>
Soil survey of Imperial, Cal. p. 587 .....	A26.5:901 <sup>1</sup>
same. 1902 .....	A26.4:9
Measurements, english vs. metric system of (Abbe). 1901. p. 73...	A29.6:29
Measures. See Weights and measures.	
Meat:	
Analysis of, testing of apparatus and method (Schweitzer and Fox). 1891. p. 40 .....	A7.3:31
Australian trade (Reynolds). p. 92 .....	A4.1:893-4
Berlin consumption. 1890. p. 45 .....	A27.9:28
Bread and, consumption in Missouri, data relating to (Gibson and others). 1896 .....	A10.3:31
Canned, chemical examination of (Wiley). 1899 .....	A7.4:5
Composition and cooking (Woods). 1896 .....	A1.9:34
Cooking, losses in, experiments on, 1898-1900 (Grindley and others). 1901 .....	A10.3:102
Curing of. p. 97 .....	A4.1:895-6
Dressed—	
freight rates on, from Chicago to New York. 1895. p. 553.	A1.10:895
same. 1896. p. 598 .....	A1.10:896
traffic in United States, answers to questions regarding (Colman). p. 277 .....	A4.1:886
European consumption. 1876. p. 498 .....	A27.9:14
Federal inspection (Salmon). 1894. p. 67 .....	A1.10:894
Fresh, shipments of, to Europe. p. 312 .....	A1.1:876
same, p. 374 .....	A1.1:877
German imperial inspection law, translation and German text of. p. 523 .....	A4.1:900
same. 1901 .....	A4.4:32
Great Britain (Halstead). p. 508 .....	A4.1:900
Importation into Germany from U. S. 1896. p. 100 .....	A4.1:893-4
Industries of United States (Clark). p. 359 .....	A4.1:887-8
Inspection of, for animal parasites. 1898 .....	A4.3:19
London consumption. 1874. p. 460 .....	A27.9:13
Meat products and—	
Analysis of provisional methods for (Bigelow) 1902. p. 7 .....	A7.3:65
At Paris Exposition, 1900 (Alvord). p. 223 .....	A4.1:900
Packing, salt used in. p. 491 .....	A4.1:884.
same. 1884. p. 288 .....	A4.2:An5
Pathological conditions found in inspection (Salmon). p. 52 .....	A4.1:900
Preserved, adulterations of (Bigelow and others). 1902. p. 375.	A7.3:13 <sup>10</sup>
Products, export trade in. 1889. p. 69 .....	A1.1:889
same, p. 22 .....	A4.1:889-90
same, p. 10 .....	A4.2:B39
Question analyzed (Sprague). p. 462 .....	A1.1:883
Salted, inspection of, for export. p. 88 .....	A1.1:890
same, p. 76 .....	A4.1:889-90
Shanghai inspection (Blackwood). p. 205 .....	A4.1:898.
South Africa (Stowe). p. 512 .....	A4.1:900
See also Bacon—Canned meats—Pork—Preserved meat—Live stock—Sausages.	
Meat or cheese skipper (Murtfeldt). 1893. p. 170 .....	A9.7:6
Mechanic arts:	
Colleges of. See Agricultural colleges.	
Student apprentice of (Hoffman). 1901. p. 186 .....	A10.3:99
Mechanic arts section, Association of American Agricultural Colleges and Experiment Stations, report of:	
1893. p. 95 .....	A10.3:20
1894. p. 89 .....	A10.3:24
1895. pp. 18, 97 .....	A10.3:30
1896. pp. 26, 111 .....	A10.3:41
1897. pp. 38, 91 .....	A10.3:49
1898. p. 134 .....	A10.3:85

# Index

Classification no.

Mechanic arts section, Association of American Agricultural Colleges and Experiment Stations, report of—Continued	
1899. p. 96 .....	A10.3:76
1900. pp. 21, 183 .....	A10.3:99
1901. pp. 33, 131 .....	A10.3:115
Mechanical soil analysis. <i>See</i> Soils.	
Mechanical drawing:	
Course of instruction in (Randolph). 1901. p. 184 .....	A10.3:99
Technical schools (Flather). 1894. p. 81 .....	A10.3:20
Mechanical engineering and mechanic arts, education in (Thurston). 1896. p. 111 .....	A10.3:41
Mechanical work, what shall we give to students of our agricultural colleges? (Drake). 1895. p. 71 .....	A10.3:24
Media:	
Acid, growth of tuberculosis bacillus upon (De Schweinitz and Dorset). 1896. p. 7 .....	A4.3:13
Culture, for biochemic investigations (De Schweinitz). p. 145 ..	A4.1:899
Medical climatology, synopsis of course of lectures in, to senior class medical department University of Texas (Cline). 1902. p. 110 .....	A29.3:31
Medical Congress, 1900. <i>See</i> Paris, Thirteenth International Medical Congress, 1900.	
Medical zoology. <i>See</i> Zoology.	
Medicinal and condimental cattle and poultry foods. 1901. p. 22..	A1.9:144
Medicine Lodge, Kansas:	
Field work at, notes on (Hinman). 1893. p. 31 .....	A7.3:40
Seed-selection work at, résumé of (Carr). 1893. p. 28 .....	A7.3:40
Sorghum sugar experiments at—	
1889 (Sanborn). p. 77 .....	A7.3:26
1889 (Wiley). pp. 9, 30 .....	A7.3:26
1892 (Carr). p. 25 .....	A7.3:37
Medicines:	
Administration of, to cattle (Murray). p. 9 .....	A4.2:C29 <sup>1</sup>
Methods of administering, to horses (Michener). p. 9 .....	A4.2:H78
Mediterranean flour moth:	
Development of (Chittenden). 1896. p. 85 .....	A9.6:6
Report on. 1889. p. 166 .....	A9.7:2
Meech, Levi W. Moon and weather, report on. 1901. p. 372 .....	A29.6:29
Megilla parasite, additional note on (Riley). 1889. p. 338 .....	A9.7:1
Megnin, M. P.:	
Gape disease of fowls, and parasite by which it is caused; translated by Theobald Smith. p. 269 .....	A1.1:884
same, p. 281 .....	A4.1:884
same. 1884. p. 103 .....	A4.2:An5
Meinert, Fr. <i>Lucilia nobilis</i> parasitic on man; translated by Martin L. Linell. 1892. p. 36 .....	A9.7:5
Meissl method, application of, to mixed butters (Besana). 1890. p. 105 .....	A7.3:24
Melanoplus devastator, dipterous parasite of, in California (Coquillett). 1892. p. 22 .....	A9.7:5
Melanoplus spretus, investigation to determine whether, breeds permanently in Turtle Mountains in North Dakota (Hunter). 1900. p. 30 .....	A9.6:22
Melber, F., address of, before national road conference, July, 1894. p. 58 .....	A22.3:10
Melbourne, Australia, irrigation conference, Mar. 25–28, 1890, notes of. 1891. p. 250 .....	A15.2:P94 <sup>1</sup>
Melica and stipa, notes on (Piper). p. 10 .....	A3.4:27
Melittia cucurbitæ. <i>See</i> Squash borer.	
Mell, P. H. Cotton plant, climatology of. 1893 .....	A29.3:8
Meloid genus. <i>See</i> Leonia rileyi.	
Melon-plant louse. <i>See</i> Cotton-plant louse.	
Melons, stock, cultivation of. 1897. p. 8 .....	A1.9:65
Membracidae (tree hoppers), some North American food-plants of (Goding). 1892. p. 92 .....	A9.7:5
Mendocino County, California, Indians of, plants used by (Chesnut). 1902. p. 295 .....	A6.5:7

	<b>Index</b>
	<b>Classification no.</b>
Meng, J. S. Phosphoric acid, additional notes on. 1892. p. 27....	A7.3:35
Menhaden fisheries of Long Island. 1870. p. 39.....	A27.9:8
Menozzi, —. Volatile acids, variations of, in butter fat. 1890. p. 111.....	A7.3:24
Mercer, A. S.: California cattle, destruction of, by various diseases; with report of autopsies by Dr. Bowhill. p. 452 .....	A4.1:887-8
Cattle industry of California. p. 239.....	A4.1:886
Merchandise, domestic, total value of exports of, 1890-95. p. 551.....	A1.10:895
Same, 1890-96. p. 596 .....	A1.10:896
Merino ram "Ontario," account of. p. 355.....	A1.1:866
Merinos: American, of Vermont. p. 484 .....	A1.1:865
Spanish, and their management (Boynton). p. 196.....	A1.1:864
Merriam, Clinton Hart: Arvicolinæ, description of new genus ( <i>Phenacomys</i> ) and four new species of. 1889. p. 27 .....	A5.5:2
Bats, free-tailed— from desert region of southern California, description of new species of. 1889. p. 23.....	A5.5:2
from lower Colorado River, Arizona. 1889. p. 25.....	A5.5:2
Biological reconnaissance of south-central Idaho. 1891.....	A5.5:5
Biological Survey, Agriculture Department, work of for farmer. 1897. p. 115 .....	A1.10:897
Biological survey of San Francisco mountain region and desert of Little Colorado, Arizona. 1890.....	A5.5:3
Birds which feed on mulberries. p. 285.....	A1.1:890
same, p. 285 .....	A5.1:890
Cactuses, yuccas, and agave, geographic and vertical distribution of, in deserts and desert ranges of southern California, south- ern Nevada, northwestern Arizona, and southwestern Utah. 1893. p. 345 .....	A5.5:7
Evotomys, new, from— Black Hills of South Dakota, description of. 1890. p. 119 ...	A5.5:5
Colorado, description of. 1890. p. 23 .....	A5.5:4
Pacific coast region, description of two. 1890. p. 25 .....	A5.5:4
Forest trees of San Francisco mountain region, Arizona. 1890. p. 119 .....	A5.5:3
Geographic distribution of animals and plants in North America. p. 203.....	A1.10:894
Grasshopper mouse, descriptions of two new species and one new subspecies of. 1889. p. 1.....	A5.5:2
Ground squirrels— five new, of genus <i>Tamias</i> , descriptions of. 1890. p. 17.....	A5.5:4
new species of, from arid lands of the Southwest, description of. 1889. p. 19.....	A5.5:2
three new, of <i>Spermophilus spilosoma</i> group, descriptions of. 1890. p. 37 .....	A5.5:4
Hesperomys, new species of, from southern Florida, description of. 1890. p. 53.....	A5.5:4
Kangaroo rats, three new, descriptions of, with remarks on iden- tity of <i>Dipodomys ordii</i> of Woodhouse. 1890. p. 41 .....	A5.5:4
Life zones and crop zones of U. S. 1898.....	A5.3:10
Mammals— new genus and two new species of, description of. 1891. p. 115.	A5.5:5
North American— descriptions of fourteen new species and one new genus. 1889 .....	A5.5:2
twenty-six new species of, description of. 1890.....	A5.5:4
small, measurement of, and preparation of museum skins, brief directions for. 1889 .....	A5.4:11
Marmot, new, from Black Hills of Dakota, description of. 1889. p. 7.....	A5.5:2
Marten, new ( <i>Mustela caurina</i> ), from northwest coast region of United States, description of. 1890. p. 27.....	A5.5:4
Mink, special report on. p. 488.....	A1.1:888
same, p. 488 .....	A5.1:888



# Index

Classification no.

## Merriam, Clinton Hart—Continued

Molossus, new species of, from California, description of. 1890. p. 31 .....	A5.5:4
Pheasants, introduced, special report on. p. 484.....	A1.1:888
same, p. 484 .....	A5.1:888
Pika, new species of, from Sierra Nevada Mountains, Cal., description of. 1889. p. 11.....	A5.5:2
Pocket gopher, of genus Geomys, from western Nebraska, description of. 1890. p. 51.....	A5.5:4
Pocket gophers, family Geomyidæ, exclusive of species of Thomomys, monographic revision of. 1895 .....	A5.5:8
Pocket mice, North American, revision of. 1889.....	A5.5:1
Prairie dog—	
destruction of, directions for.....	A5.4:32
new, from Wyoming, description of. 1890. p. 33 .....	A5.5:4
of Great Plains. 1901. p. 257.....	A1.10:901
Rainfall and charts of rainfall. 1902. p. 229.....	A29.6:30
Shasta, Mount, Cal., biological survey of. 1899.....	A5.5:16
Shrews, American, of genus Sorex, synopsis of. 1895. p. 57 ....	A5.5:10
Shrews of American genera Blarina and Notiosorex, revision of. 1895. p. 5 .....	A5.5:10
Skunks, little striped, of genus Spilogale, contribution toward revision of. 1890. p. 1 .....	A5.5:4
Spermophile, new, from—	
Arizona, northwestern, description of. 1889. p. 17.....	A5.5:2
California, southern, description of. 1889. p. 15 .....	A5.5:2
Trees and shrubs, distribution of, in deserts and desert ranges of southern California, southern Nevada, northwestern Arizona, and southwestern Utah. 1893. p. 285.....	A5.5:7
Weasels of North America, synopsis of. 1896.....	A5.5:11
See also, for reports as Chief, Biological Survey Division, Agriculture Department, 1897 and 1902.....	A5.1:
See also, for reports as Chief, Ornithology and Mammalogy Division, 1886-1896 .....	A5.1:
See also, as editor, Cooke, Wells W.; as collector, Stearns, Robert Edwards Carter — Stejneger, Leonhard.	
Merrick, E. C. Pacific coast, climate of. p. 280.....	A1.1:867
Merrill, Elmer D.:	
Aristida purpurea nutt., and its allies. 1901.....	A3.4:34
Arizona grasses. 1901.....	A3.4:32
Grasses—	
nomenclature of, some changes in. 1901. p. 5.....	A3.4:35
some species of, published by S. B. Buckley. 1901.....	A3.4:35
North American species of Spartina. 1902 .....	A19.3:9
See also, as joint author, Scribner, Frank Lamson.	
Merrill, L. H. See, as joint author, Woods, Charles Dayton.	
Merrill, Lewis A. Vaccination against blackleg in Utah. p. 469 ...	A4.1:899
Merry, G. Factory cheese and how it is made. 1896. p. 45.....	A4.3:15
Same, reprinted, n. d. ....	A4.4:19
Mersivan, Turkey, temperature and rainfall at (Abbe). 1897. p. 245 .....	A29.6:25
Mesmer, Louis. See, as joint author, Heileman, W. H. — Holmes, J. Garnett.	
Mesquite tree as tanning material (McMurtrie). 1873. p. 31 .....	A27.9:11
Metabolism:	
Effects of severe and prolonged muscular work on (Atwater and Sherman). 1901.....	A10.3:98
Experiments in which balance of income and outgo was determined, digest of (Atwater and Langworthy).....	A10.3:45
Experiments on effect of muscular work upon digestibility of food and metabolism of nitrogen, conducted at University of Tennessee, 1897-1899 (Wait). 1901.....	A10.3:89
same, 1899-1900 (Wait). 1902 .....	A10.3:117
Experiments on metabolism of matter and energy in the human body (Atwater and others) .....	A10.3:69
same, value of (Langworthy). 1898. p. 1003 .....	A10.6:9
same, 1900 (Atwater and others).....	A10.3:109



<b>Metabolism—Continued</b>	
Experiments on metabolism of nitrogen, sulphur, and phosphorus in human organism (Sherman). 1902.....	A10.3:121
Milch cows, investigations on (Hagemann). 1899. pp. 803, 903..	A10.6:10
Nitrogen and carbon in human organism, metabolism of, with respiration calorimeter of special construction (Atwater and others). 1897.....	A10.3:44
Nutrients in animal body, metabolism of, and source of muscular energy (Zuntz). 1897. p. 538 .....	A10.6:7
Metabolized nitrogen, excretion of, by animals (Langworthy). 1897. p. 817 .....	A10.6:7
Metal railway tracks. <i>See</i> Railway tracks.	
Metals. <i>See</i> Aluminum—Copper—Iron—Lead.	
Metaphosphoric acid. <i>See</i> Cotton seed meal.	
<b>Meteor:</b>	
Bright—	
note on (Abbe). 1897. p. 261.....	A29.6:25
same (Abbe). 1898. pp. 20, 318, 569.....	A29.6:26
report on (Hazen). 1897. p. 484.....	A29.6:25
Iowa, of March 27, 1894 (Abbe). p. 128.....	A29.6:22
Noise made by (Abbe). 1895. p. 57.....	A29.6:23
November, notes on (Kimball). 1901. p. 509.....	A29.6:29
Meteoric story, sensational, note on (Abbe). 1898. p. 363 .....	A29.6:26
Meteorologic waves, report on (Hazen). 1899. p. 323 .....	A29.1:898
Meteorological and other forms and reports: should they be simplified? are modifications desirable? (Evans). 1902. p. 168....	A29.3:31
Meteorological balloon ascension at Strassburg, Germany (Rotch). 1901. p. 298 .....	A29.6:29
Meteorological cablegrams, notes on (Abbe). 1900. pp. 248, 448...	A29.6:28
Meteorological century, note on (Abbe). 1900. p. 591.....	A29.6:27
Meteorological charts of Great Lakes.....	A29.13:
Meteorological commission, proposed, note on (Abbe). 1901. p. 312.	A29.6:29
Meteorological committee, international:	
Note on (Abbe). 1899. p. 103 .....	A29.6:27
Proceedings of (Abbe). 1900. p. 446 .....	A29.6:28
Report on (Kimball). 1902. p. 134.....	A29.6:30
Meteorological conferences. <i>See</i> Munich—Paris.	
Meteorological congresses. <i>See</i> Chicago—Mexican national meteorological congress—Paris.	
Meteorological institute of Prussia, work of, notes on (Abbe). 1901. p. 70 .....	A29.6:29
Meteorological institution, Royal Prussian, celebration of semi-centennial of (Abbe). 1897. p. 491.....	A29.6:25
Meteorological journal, new, notes on (Abbe). 1900. pp. 160, 252..	A29.6:28
Meteorological library, note on (Abbe). 1900. p. 208.....	A29.6:28
Meteorological notes:	
(Abbe). Aug., 1893—Oct., 1902.....	A29.6:
[Individual articles are entered in this index under their specific subjects.]	
Monthly (Kimball) .....	A29.6:
[Individual articles are entered in this index under their specific subjects.]	
Meteorological notes by Wm. Scoresby, jr., report on (Abbe). 1897. p. 62 .....	A29.6:25
Meteorological notes from Porto Rico (Geddings). 1900. p. 287 ...	A29.6:28
Meteorological observations:	
Alaska, 1894 (Tibbey). p. 174 .....	A29.6:22
Bayonne, N. J., during burning of plant of Standard Oil Company at, July 5, 6, and 7, 1900 (Mitchell). p. 325.....	A29.6:28
Circle City, Alaska (Holt).. 1896-98. p. 542.....	A29.6:26
Eagle, Alaska (Henry). 1900. p. 390.....	A29.6:28
Hacienda Perla, Puerto Rico (Hansard). 1898. p. 407 .....	A29.6:26
Havana, Cuba, notes on (Abbe). 1898. pp. 60, 104.....	A29.6:26
Honolulu, Hawaiian Islands, monthly, March, 1894—April, 1901 (Lyons).....	A29.6:
Influence on vegetation (Schreiber). 1895. p. 395 .....	A29.3:11 <sup>2</sup>
International, summary of (Dunwoody). 1893 .....	A29.5:A
Klondike, note on (Abbe). 1898. p. 253.....	A29.6:26

# Index

	Classification no.
<b>Meteorological observations—Continued</b>	
Made to determine probable state of sky at several stations along path of total eclipse of sun, May 28, 1900 (Bigelow). 1897. p. 394 .....	A29.6:25
Nome, Alaska, Sept., 1900, note on (Abbe). p. 397 .....	A29.6:28
Permanent record, should not a book for, be furnished to section centers and voluntary stations?—	
(Bauer). 1899. p. 121 .....	A29.3:24
(Linney). 1899. p. 121 .....	A29.3:24
(Loveland). 1899. p. 120 .....	A29.3:24
(Palmer). 1899. p. 122 .....	A29.3:24
Port au Prince, Hayti, monthly, notes on (Abbe). 1898. pp. 59, 103, 163, 212, 253, 406, 458 .....	A29.6:26
Public schools, notes on (Abbe). 1899. p. 550 .....	A29.6:27
same (Wilkinson). 1899. p. 550 .....	A29.6:27
Reports by cable from Iceland, notes on (Abbe). 1899. p. 103 ..	A29.6:27
Reports of voluntary observers, monthly, examination of; is it desirable to report back to voluntary observer errors and irregularities discovered in his report? (Bauer). 1902. p. 172 .....	A29.3:31
Rivas, Nicaragua, monthly, notes on, 1898 (Abbe). pp. 61, 162, 210, 307, 408, 459, 541 .....	A29.6:26
same, 1899 (Flint). pp. 11, 97, 153, 193, 249, 299, 360, 462, 509, 546 .....	A29.6:27
San Francisco, 1893-94 (Featherstone). p. 128 .....	A29.6:22
Simultaneous, in U. S., in 18th century (McAdie). 1895. p. 303 ..	A29.3:11 <sup>2</sup>
Travelers (Abbe). 1902. p. 270 .....	A29.6:30
With kites at sea, notes on (Kimball). 1901. p. 563 .....	A29.6:29
<i>See also</i> Magnetic observations — Meteorological work.	
<b>Meteorological observatories:</b>	
Creation of, on islands connected by cable with a continent (Albert, Prince of Monaco). 1894. p. 158 .....	A29.3:11 <sup>1</sup>
Suburban (Sims). 1902. p. 215 .....	A29.3:31
<i>See also</i> Canada — Juvisy observatory — St. Ignatius College.	
<b>Meteorological observers:</b>	
Arctic and Antarctic, notes on (Abbe). 1901. p. 558 .....	A29.6:28
Voluntary—	
for Monthly Weather Review, lists of. 1891. following pp. 232 and 318 .....	A29.6:19
same. 1892. following p. 346 .....	A29.6:20
of U. S. Hydrographic Office, instructions to (Abbe). 1901. p. 314 .....	A29.6:29
Meteorological office, London, notes on (Abbe). 1900. p. 68 .....	A29.6:28
Meteorological optics, J. M. Pernter's, note on (Abbe). 1902. p. 132 .....	A29.6:30
<b>Meteorological phenomena:</b>	
Ice caves and frozen wells as (Kimball). 1901. p. 366 .....	A29.6:29
Photographs of, notes on (Abbe). 1898. p. 67 .....	A29.6:26
Meteorological reporting stations, voluntary (Walz). 1898. p. 208 ..	A29.6:26
<b>Meteorological records:</b>	
Early, notes on (Abbe). 1901. p. 565 .....	A29.6:29
Evidence in court (Linney). 1902. p. 180 .....	A29.3:31
same (Lyons). 1902. p. 183 .....	A29.3:31
Hourly, at Pikes Peak and Colorado Springs from November, 1892, to September, 1894, brief discussion of, (Morrill). 1896. p. 215 .....	A29.1:896
Iowa, notes on (Abbe). 1899. p. 17 .....	A29.6:27
Long-continued, notes on (Abbe). 1897. p. 98 .....	A29.6:25
Ohio, notes on (Abbe). 1900. p. 343 .....	A29.6:28
Preserving, for reference and study, best means of (Emery). 1902. p. 175 .....	A29.3:31
<b>Meteorological Society:</b>	
American, notes on (Abbe). 1898. p. 64 .....	A29.6:26
German, eighth general meeting of (Rotch). 1898. p. 160 .....	A29.6:26
Mauritius, notes on (Kimball). 1901. p. 565 .....	A29.6:29
Royal, notes on (Abbe). 1898. p. 564 .....	A29.6:26
<b>Meteorological stations:</b>	
Experimental agriculture at (Abbe). 1902. p. 410 .....	A29.6:30

<b>Meteorological stations—Continued</b>	
Harvard University, note on (Abbe)—	
1897. p. 540 .....	A29.6:25
1901. p. 69 .....	A29.6:29
Highest station in world, visit to (Ward). 1898. p. 150.....	A29.6:26
Mountain, in Australia (Abbe). 1898. p. 166.....	A29.6:26
Needed, new, notes on (Abbe). 1900. p. 556.....	A29.6:28
Publication of results of observations (Hann). 1894. p. 1.....	A29.3:11 <sup>1</sup>
Rockall as, note on (Abbe). 1898. p. 311.....	A29.6:26
Seismographs at (Abbe). 1897. p. 259.....	A29.6:25
Tierra del Fuego, notes on (Abbe). 1897. p. 493 .....	A29.6:25
Meteorological superstitions, notes on (Abbe). 1898. p. 216.....	A29.6:26
Meteorological symbols, international (Abbe). 1898. pp. 311, 414..	A29.6:26
<b>Meteorological tables:</b>	
Monthly temperature, rain, etc., from Smithsonian Institution, June, 1863–Jan., 1872 .....	A27.9:
Monthly, July, 1891–May, 1895; June, 1895–Apr., 1902 (Henry) ..	A29.6:
Meteorological tables and charts, monthly, description of, May–Oct., 1902 (Stockman) .....	A29.6:30
<b>Meteorological terms:</b>	
New, note on (Abbe). 1900. p. 18 .....	A29.6:28
Objectionable, note on (Abbe). 1900. p. 115.....	A29.6:28
Meteorological use of term "local" (Abbe). 1898. p. 207 .....	A29.6:25
<b>Meteorological work:</b>	
Agricultural experiment stations and agricultural colleges and their relations to Weather Bureau (Harrington). 1892. p. 42.	A10.3:7
Agricultural institutions (Harrington). 1892.....	A10.3:10
Alaska (Henry). 1898. p. 154 .....	A29.6:26
India, history of (Kimball). 1902. p. 31.....	A29.6:30
Outline of scope and character of, in Franz-Josef land, 1898–99. (Baldwin). 1901. p. 351 .....	A29.1:900
Smithsonian Institution (Langley). 1895. p. 216 .....	A29.3:11 <sup>2</sup>
United States Signal Service, 1870 to 1891 (Abbe). 1895. p. 232.	A29.3:11 <sup>2</sup>
<i>See also</i> Meteorological observations.	
<b>Meteorologist:</b>	
Astronomy for, note on (Abbe). 1898. p. 562.....	A29.6:26
Work of, for benefit of agriculture, commerce, and navigation (Bigelow). 1899. p. 71 .....	A1.10:899
<b>Meteorology:</b>	
Abstracts of reports of agricultural experiment stations on, 1889– 1902 .....	A10.6:
Addresson, at British association, Belfast (Schuster). 1902. p. 448.	A29.6:30
<b>Agricultural—</b>	
notes on, with special reference to rainfall element (Linney). 1899. p. 85 .....	A29.3:24
report on. p. 97.....	A1.1:869
same, p. 113.....	A1.1:870
Argentina (Abbe). 1902. p. 315 .....	A29.6:30
Army medical department, connection with development in (Smart). 1895. p. 207 .....	A29.3:11 <sup>2</sup>
Belgium, history of, notes on (Abbe). 1901. p. 69 .....	A29.6:29
Bibliography of American contributions to, note concerning (Fassig). 1895. p. 326.....	A29.3:11 <sup>2</sup>
Brooklyn Museum of, notes on (Abbe). 1900. p. 163.....	A29.6:28
Climate and, of Death Valley, Cal. (Harrington). 1892.....	A29.3:1
Climatology vs. (Whitney). 1898. p. 301 .....	A29.6:26
College course, notes on (Abbe). 1900. p. 543 .....	A29.6:28
Colleges; to what extent is it taught at present; should it be offered as an undergraduate or as a postgraduate course? (Loveland). 1902. p. 90.....	A29.3:31
Conditions favorable to spontaneous combustion, note on (Abbe). 1900. p. 249 .....	A29.6:28
Conditions following St. Vincent and Martinique eruptions, 1902 (Kimball). p. 267 .....	A29.6:30
Constants and units used in, notes on (Abbe). 1896. p. 462 ....	A29.6:24
Costa Rica, notes on (Abbe). 1900. p. 541.....	A29.6:28
Crops and, Mauritius, note on (Abbe). 1897. p. 354.....	A29.6:25

# Index

Classification no.

## Meteorology—Continued

### Cycles in—

- notes on (Abbe). 1897. p. 544..... A29.6:25
- report on (Abbe). 1897. p. 57..... A29.6:25
- Data collected, use of (Palmer). 1902. p. 178..... A29.3:31
- Eclipse and allied problems (Bigelow). 1902..... A29.5:I
- Ecuador, note on (Abbe). 1900. p. 67..... A29.6:28

### Elementary—

- talk on (Davison). 1899. p. 144..... A29.6:27
- text-books and works of reference for students of (Phillips).  
1902. p. 408..... A29.6:30
- English literature, 1337-1699 (Symons). 1895. p. 338..... A29.3:11<sup>2</sup>
- Extremes at Northfield, Mass. (Elmer). p. 251..... A29.6:26
- France, notes on (Abbe). 1898. p. 553..... A29.6:26
- French Indo-China, notes on (Abbe). 1901. p. 263..... A29.6:29
- Geodesy and, notes on (Abbe). 1900. p. 545..... A29.6:28
- Geography and, popular errors in (Abbe). 1901. p. 375..... A29.6:29
- Geological Survey, note on (Abbe). 1897. p. 541..... A29.6:25
- Great Britain, notes on (Abbe). 1899. p. 109..... A29.6:27
- Hawaii (Kimball). 1902. p. 364..... A29.6:30
- Higher, in Weather Bureau (Bigelow). 1902. p. 19..... A29.3:31
- Historical events in, note on (Abbe). 1900. p. 17..... A29.6:28
- Instrumental, historical sketch of (Gerland). 1896. p. 687..... A29.3:11<sup>3</sup>
- Instruments, elastic suspension for (Abbe). 1894. p. 25..... A29.6:22
- Is every seventh year a wet one? 1865. No. 6. p. 15..... A27.9:3
- Italian mountains (Denza). 1896. p. 659..... A29.3:11<sup>3</sup>
- Johns Hopkins University (Fassig). 1898. p. 306..... A29.6:26
- Julius Hann's (Bigelow). 1902. p. 298..... A29.6:30
- Kites in, new field for (Kimball). 1901. p. 419..... A29.6:29
- same, notes on (Abbe). 1896. p. 416..... A27.6:24
- Laboratory work in (Kimball). 1902. p. 313..... A29.6:30

### Lectures on—

- in schools, note on (Abbe). 1900. p. 19..... A29.6:28
- notes on (Abbe). 1900. pp. 164, 208..... A29.6:28
- popular, including lectures to farmers' institutes, social gatherings, societies, etc.; are such lectures valuable in proportion to time given? what should be the general character of such lectures? (Smith). 1902. p. 92..... A29.3:31
- Lunar influences in, notes on (Abbe). 1901. p. 315..... A29.6:29
- Madagascar, note on (Abbe). 1901. p. 375..... A29.6:29

### Magnetism and—

- notes on, monthly. Oct., 1894-Feb., 1895..... A29.6:
- report on, monthly, March, 1895-June, 1896 (Bigelow)..... A29.6:
- Mathematics and, notes on (Abbe). 1898. p. 267..... A29.6:26
- Mathematics in, notes on (Abbe). 1900. p. 548..... A29.6:28
- Mexico, brief sketch of development of (Aguilar y Santillan).  
1895. p. 335..... A29.3:11<sup>2</sup>

*See also* Mexican National meteorological congress.

- Monthly list of papers bearing on, Jan., 1899-Dec., 1902 (Phillips). A29.6:
- Mountain stations for (Abbe). 1902. p. 410..... A29.6:30
- New elementary treatise on (Abbe). 1898. p. 563..... A29.6:26
- North Atlantic, monthly notes on, Jan., 1894-June, 1895..... A29.6:
- Obscure points in, notes on (Abbe). 1899. p. 108..... A29.6:27
- Optical, circumhorizontal arc in (Besson). 1902. p. 486..... A29.6:30

### Panama—

- contributions to (Abbot). 1899. p. 7..... A29.6:28
- report of, 1899 (Abbot). p. 463..... A29.6:27
- Paris Exposition, note on (Abbe). 1900. p. 19..... A29.6:28

*See also* Paris international meteorological congress.

- Periodic terms in, due to rotation of sun on its axis (Bigelow).  
1895. p. 500..... A29.3:11<sup>2</sup>
- Periodicity in, notes on (Abbe). 1900. p. 547..... A29.6:28
- Photography in, notes on (Abbe). 1900. p. 159..... A29.6:28
- Physics and—
- in universities (Abbe). 1899. p. 258..... A29.6:27
- notes on. 1902. p. 445..... A29.6:30
- Present status of, notes on (Abbe). 1899. p. 313..... A29.6:27

# Index

Classification no.

## Meteorology—Continued

Primary work for use of schools (Connor). 1899. p. 102.....	A29.3:24
Public health and, relation between (Phillips). 1895. p. 171...	A29.6:23
Public schools—	
how much should be attempted; methods of teaching (Chaf- fee). 1902. p. 85 .....	A29.3:31
note on (Abbe)—	
1894. p. 512 .....	A29.6:22
1896. p. 458 .....	A29.6:23
1897. p. 17 .....	A29.6:25
1899. p. 469 .....	A29.6:27
Recent publications on (McCarty). 1896. pp. 76, 112, 153, 198..	A29.6:24
Redfeld and Espy period of, 1830 to 1855 (Davis). 1895. p. 305.	A29.3:11 <sup>2</sup>
Report on—	
1863. p. 622. (From Smithsonian Inst.).....	A1.1:863
1864. p. 609 .....	A1.1:864
1865. (Grosh). p. 571 .....	A1.1:865
1866. (Grosh). p. 611 .....	A1.1:866
1867. (Grosh). p. 429 .....	A1.1:867
1868. p. 612 .....	A1.1:868
1869. p. 638 .....	A1.1:869
1870. p. 621 .....	A1.1:870
Russia, notes on (Abbe). 1899. p. 103.....	A29.6:27
Schools and, relation of (Kimball). 1902. p. 131.....	A29.6:30
Searchlight in, use of (Abbe). 1897. p. 206 .....	A29.6:25
Seismometers in, notes on (Abbe). 1901. p. 420.....	A29.6:29
Solar and terrestrial magnetism in relation to (Bigelow). 1898...	A29.3:21
Solar magnetism in relation to (Bigelow). p. 519.....	A29.1:891 <sup>3</sup>
South African, notes on (Abbe). 1900. p. 13.....	A29.6:28
Statistics of, how to improve them to meet needs of medical pro- fession, etc. (McGann). 1899. p. 80 .....	A29.3:24
same (Wilson). 1899. p. 82.....	A29.3:24
Study of—	
by correspondence (Abbe). 1898. p. 267 .....	A29.6:26
under existing conditions of Weather Bureau station work, is it practicable to require assistants to pursue a systematic course of? (Salisbury). 1902. p. 82.....	A29.3:31
Subjects in, explanation of (Newcomb). 1902. p. 127.....	A29.6:30
Sun spots and, notes on (Abbe). 1901. p. 263.....	A29.6:29
Teaching of, by laboratory method. 1899. p. 468.....	A29.6:27
Terrestrial magnetism and, in 15th, 16th, and 17th centuries, con- tribution to bibliography of (Hellman). 1895. p. 352.....	A29.3:11 <sup>2</sup>
Text-book of, Julius Hann's, note on (Abbe). 1901. p. 74.....	A29.6:29
Theoretical, in U. S., 1855 to 1870, some remarks on (Waldo). 1895. p. 317 .....	A29.3:11 <sup>2</sup>
Thermometric scale used in (Abbe). 1895. p. 255.....	A29.6:23
Universities and, notes on (Abbe)—	
1899. pp. 155, 420, 549 .....	A29.6:27
1900. p. 165 .....	A29.6:28
1901. p. 264 .....	A29.6:29
Weather Bureau men as instructors in, notes on (Abbe). 1900. p. 446 .....	A29.6:28
Wellmann expedition, 2d, notes on (Abbe). 1898. p. 167.....	A29.6:26
What meteorology is doing for farmer (Harrington). 1894. p. 117.	A1.10:894
Yukon, report on (Myers). 1899. p. 100 .....	A29.6:27
<i>See also</i> Barometer—Blizzard—Climate—Climatology—Eclipse— Marine Meteorology Division—New England Meteorological Society—Pogonip—Sulphur rains—Sun spots—Weather.	
Meteorology and the growth of the beet (Davy). 1879. p. 284.....	A1.6:28
Meter, value of the, note on (Abbe). 1897. p. 19.....	A29.6:25
Metric system:	
Austria. 1873. p. 189.....	A27.9:11
English vs., notes on (Abbe). 1901. p. 73 .....	A29.6:29
Explanation of—	
1895. p. 614 .....	A1.10:895
1896. p. 634 .....	A1.10:896
1897. p. 672 .....	A1.10:897



# Index

	Classification no.
<b>Mexican cotton-boll weevil:</b>	
Present status of, in U. S. (Hunter). 1901. p. 369.....	A1.10:901
Report on—	
1895. (Howard) .....	A9.5:6 <sup>1</sup>
same (in Spanish) .....	A9.5:6 <sup>2</sup>
1896. Revised .....	A9.5:14 <sup>1</sup>
same (in Spanish). 1896.....	A9.5:14 <sup>2</sup>
1897. Revised .....	A9.5:18 <sup>1</sup>
same (in Spanish). Feb., 1897 .....	A9.5:18 <sup>2</sup>
same (in German). Feb., 1897.....	A9.5:18 <sup>3</sup>
1897. Revised .....	A9.5:27
1898. Supplementary .....	A9.5:33
1901. (Mally) .....	A1.9:130
Texas, report on (Townsend). 1895. p. 295 .....	A9.7:7
<i>See also</i> Cotton insects.	
<b>Mexican grasses:</b>	
Collected by E. W. Nelson in Mexico, 1894-95 (Scribner and Smith). 1897. p. 11 .....	A3.3:4
New, description of (Vasey). 1893. p. 281.....	A6.5:1
New or little known (Scribner). 1899.....	A3.4:19
Some recent collections of (Scribner and Merrill). 1900. p. 5....	A3.3:24
<b>Mexican national meteorological congress—</b>	
1st, notes on (Abbe). 1900. p. 557.....	A29.6:28
2d, notes on (Kimball). 1901. p. 512 .....	A29.6:29
same (Abbe). 1902. p. 132.....	A29.6:30
<b>Mexican telegraph company, stations of, note on (Abbe). 1900.</b> p. 112 .....	A29.6:28
<b>Mexican umbelliferæ, mostly from state of Oaxaca, recently collected</b> by C. G. Pringle and E. W. Nelson (Coulter and Rose). 1895. p. 289 .....	A6.5:3
<b>Mexico:</b>	
Agricultural production of, for 1889 and 1892 .....	A27.9:32
Agriculture in, note on (Hinton). 1884. No. 13. p. 27.....	A27.9:22
same. 1887. p. 491 .....	A27.9:25
Cattle industry (Griffith). p. 503 .....	A4.1:900
Climate of. 1894. p. 333.....	A27.9:32
Climatological data, monthly, notes on, Jan., 1896-July, 1899 (Abbe); Sept., 1899-Oct., 1902 (Pastrana) .....	A29.6:
Coast of, September "norther" on (Baturoni). 1892. p. 252 ..	A29.6:20
Coccidæ, new, collected in, by C. H. T. Townsend, notes and descriptions of (Cockerell). 1896. p. 31 .....	A9.8:4
Coffee in, cultivation of (Foster). 1876. p. 268.....	A27.9:14
Commerce between U. S. and, for 1873, 1878, 1883, 1888, and 1893. p. 492 .....	A27.9:32
Cotton crop and its enemies in, consular reports on. 1885. App. p. 59 .....	A8.1:4
Ferns collected in, by J. N. Rose during months of August and September, 1897 (Davenport). 1897. p. 146.....	A6.5:5
Insects affecting stored cereal and other products in (Chittenden). 1896. p. 27 .....	A9.8:4
Insects of, injurious, liable to be introduced into U. S. 1896 ....	A9.8:4
Insects of economic importance in, report of trip to investigate (Townsend). 1896. p. 9 .....	A9.8:4
Lichens from, collected by Edward Palmer, from 1888 to 1892, list of (Eckfeldt). 1893. p. 291 .....	A6.5:1
Maize of United States in, use of. 1893. p. 256.....	A27.9:31
Market for pure-bred beef cattle from U. S. (Salmon). 1902 ....	A4.3:41
Meteorology in, brief sketch of development of (Aguilar y San- tillan). 1895. p. 335.....	A29.3:11 <sup>2</sup>
<i>See also</i> Mexican national meteorological congress.	
<b>Plants—</b>	
mostly new, from U. S. and, descriptions of (Rose). 1895. p. 311 .....	A6.5:3
studies of (Rose). 1897. p. 109.....	A6.5:5
useful, notes on (Rose). 1899. p. 209.....	A6.5:5
Public lands in, prices of. 1889. p. 522 .....	A27.9:27
Railways of, statement of. 1894. p. 355.....	A27.9:32



<b>Mexico—Continued</b>	
Statistics of, 1890. p. 344 .....	A27.9:28
Storms, local, on west coast of (Rogers). 1894. p. 510 .....	A29.6:22
Water supply and irrigation in. 1885. p. 223 .....	A15.2:Ir7 <sup>1</sup>
Weather forecasts in, notes on (Abbe). 1900. p. 540 .....	A29.6:28
Weather map for, daily (Abbe). 1899. p. 107 .....	A29.6:27
Weather stations, barometric pressure at (Abbe). 1901. p. 218.	A29.6:29
Western, list of plants collected in, by Edward Palmer in 1890 (Vasey and Rose). 1890. p. 63 .....	A6.5:1
<i>See also</i> Acapulco — Alamos — Cedros Island — Colima — El Paso del Norte — Guaymas — Lower California references — Oaxaca — San Benito Island — Sonora — Tampico — Tres Marias Islands — Tuspan — Vera Cruz.	
Mexico, City of, climate of (Bárcena). 1896. p. 601 .....	A29.3:11 <sup>s</sup>
<b>Mexico, Gulf of:</b>	
Cold waves on middle coast (Garriott). 1895. p. 334 .....	A29.6:23
Northers in, notes on (Abbe). 1898. p. 568 .....	A29.6:26
Storms of, tropical, in September, 1895 (Garriott). p. 167 .....	A29.6:23
Meyer, Hugo. Climatology in German Empire, development of. 1896. p. 652 .....	A29.3:11 <sup>s</sup>
Meyers, John A. Germany, shipping horses to, experience and obser- vation in. 1898. p. 35 .....	A1.2:H78
Miami, Mo. Glanders at, outbreak of (Trumbower). p. 457 .....	A4.1:884
Mice. <i>See</i> Evotomys — Grasshopper mouse — Jumping mice — Pocket mice.	
<b>Michener, Ch. B.:</b>	
<b>Horse—</b>	
digestive organs of, diseases of. p. 15 .....	A4.2:H78
medicines to, methods of administering. p. 9 .....	A4.2:H78
wounds of, and their treatment. p. 447 .....	A4.2:H78
Missouri, cattle in, outbreak of disease among. p. 387 .....	A4.1:889-90
<i>See also</i> , as joint author, McLean, L.	
Michener, E. Agricultural ornithology. p. 287 .....	A1.1:863
<b>Michigan:</b>	
Agricultural statistics. 1869. p. 378* .....	A27.9:7
Cattle trade and allied industries of (Perry). p. 125 .....	A4.1:886
Farm resources and products of. 1868. p. 189 .....	A27.9:6
Farmers' institute work accomplished in (Taft). 1902. p. 35 ...	A10.3:120
Fruit culture in, 1872-73. p. 45 .....	A27.9:13
Fruit region, facts relating to (Clubb). 1870. p. 37 .....	A27.9:8
Insects, injurious in, some notes recorded on (Townsend). 1889. p. 42 .....	A9.7:2
San Jose scale in, present status of (Barrows). 1897. p. 27 .....	A9.6:9
Snow, yellow, in (Kimball). 1902. p. 29 .....	A29.6:30
Tornadoes of May 25, 1896, in, report on (Conger). p. 156 .....	A29.6:24
Western, fruit culture in. 1868. p. 322 .....	A27.9:6
<i>See also</i> Allegan County — Detroit — Kalamazoo.	
<b>Michigan, Lake:</b>	
Eastern shore of, agricultural notes on. 1866. p. 415 .....	A27.9:4
Fruits on eastern shore of, statistics of (Ganzhorn). 1869. p. 298*.	A27.9:7
Mirage over, notes on (Abbe). 1900. p. 544 .....	A29.6:28
<b>Micro-organismal diseases, laboratory methods for diagnosing of</b>	
certain (Dawson). p. 335 .....	A4.1:898
Micro-photographs of snow crystals, notes on (Abbe). 1900. p. 541 ..	A29.6:28
Microscopic investigations along agricultural lines, monthly (Taylor). May, 1872, to Dec., 1876 .....	A27.9:
Microscopic investigations as to internal parasites in domestic fowls, and butter and fats (Taylor). 1884 .....	A1.8:34
Microscopical examinations of fruits and fruit products (Howard). 1902. p. 103 .....	A7.3:66
Microscopists, instructions for, in examination of pork for trichina. 1896 .....	A4.2:P42
Microscopy Division, Agriculture Department .....	A18.
Microtome, work of, letter to T. Taylor (Lyman). 1881 .....	A18.2:M58
Microtus. <i>See</i> Voles, American.	

\* By a misprint, this page number appears twice.

# Index

	Classification no.
Middle States:	
Beef cattle in, feeding (Lodge). p. 212 .....	A1.1:867
Fruits and fruit trees of, propagation, influence of stocks, diseases, and enemies (Lodge). p. 199 .....	A1.1:865
Tree-planting for profit in. 1872. p. 293 .....	A27.9:10
Wine-making and vine culture in (Lodge). p. 118.....	A1.1:866
<i>See also</i> Names of States.	
Middling cotton. <i>See</i> Cotton.	
Migration of weeds (Dewey). 1896. p. 263.....	A1.10:896
Mik, Joseph. Ugimya sericariae rond, parasite of Japanese silk-worm. 1891. p. 113 .....	A9.7:4
Milan, Italy, cost of hauling farm products over wagon roads at (Spagnoli). p. 10 .....	A22.4:27
Milch cows. <i>See</i> Cows.	
Mildew:	
Notes on. 1863. No. 3, p. 13 .....	A27.9:1
Upon plants under glass, treatment of (Maynard). 1891. p. 16.	A28.5:6
<i>See also</i> Grape mildew and references.	
Miles, Nelson Appleton. Good roads, importance of, in war and peace. 1902. p. 39.....	A22.3:25
Military instruction in land-grant colleges, report of committee on (Atherton). 1901. p. 85 .....	A10.3:99
Milk:	
Acidity in, determination of (Van Slyke). 1893. p. 117.....	A7.3:38
Acidity of cream and, determination of (Hopkins and Powers). 1895. p. 125 .....	A7.3:47
Albumen in cow's milk, determination of (Van Slyke). 1894. p. 188.....	A7.3:43
Albuminoids in, estimation of (Sebelien). 1889. p. 169.....	A7.3:24
Analysis of, with view to determining its adulterations (Bourcart), 1889. p. 167 .....	A7.3:24
As food. 1898.....	A1.9:74
Bacteria in freshly drawn milk, preliminary investigations concerning number and nature of (Moore). p. 261.....	A4.1:895-6
Bacteria in, inefficiency of separators in removing (Moore). 1895. p. 431.....	A1.10:895
Bicarbonate of soda in, detection of (Pade). 1889. p. 170.....	A7.3:24
Boston and other New England cities, supply of (Whitaker). 1898 .....	A4.3:20
Butter fat in cream or, method of determining, by difference (McKeown). 1894. p. 194.....	A7.3:43
Canstadt, report on (Zeitler). 1890. p. 153.....	A7.3:24
Care of, on the farm (Pearson). 1897.....	A1.9:63
Casein in cow's milk, determination of (Van Slyke). 1893. p. 109.	A7.3:38
Citric acid in, report on (Soulhet). 1889. p. 155 .....	A7.3:24
City supply of. p. 332.....	A1.1:872
Composite samples in laboratory (Patrick). 1891. p. 26 .....	A7.3:31
Condensed—	
composition of (Shenstone). 1890. p. 149.....	A7.3:24
in Europe. 1868. p. 39 .....	A27.9:6
Cream from deep or shallow setting of, comparative amount of. 1872. p. 513 .....	A27.9:10
Curdled, fat in, estimation of content of (Kuehn). 1890. p. 162.	A7.3:24
Diphenylamine reaction in examination of, significance of (Möslinger). 1889. p. 168 .....	A7.3:24
Examination of (De Schweinitz). p. 147 .....	A4.1:898
Facts about (Pearson). 1896.....	A1.9:42
Fat in—	
determination by—	
gravimetric method (Dietrich). 1890. p. 159.....	A7.3:24
Patrick method. 1890. p. 163 .....	A7.3:24
Röse's method. 1888-89. p. 160.....	A7.3:24
Soxhlet's areometric method (Klein). 1888. p. 163.....	A7.3:24
Soxhlet-Engström and Schmoeger-Neubert method (Kühn). 1890. p. 158.....	A7.3:24
Werner-Schmidt method (Stokes). 1890. p. 158.....	A7.3:24
estimation of (Richmond). 1890. p. 162.....	A7.3:24

**Milk—Continued**

Fermentations and their relations to dairying. 1892 .....	A1.9:9
Fermentations of (Conn). 1892 .....	A10.3:9
Healthy and diseased cows, effects of tuberculin injections upon. 1896. p. 15 .....	A4.3:13
Inspection in Shanghai (Blackwood). p. 205 .....	A4.1:898
Market, plan for its improvement (Pearson). p. 158 .....	A4.1:900
Nature of (Bechamp). 1890. p. 154 .....	A7.3:24
Pasteurization and sterilization of (De Schweinitz). 1894. p. 331.	A1.10:894
Pasteurization of—	
directions for .....	A4.4:1
for butter making. 1899. p. 23 .....	A1.9:92
Pathogenic bacteria in milk and its products, vitality and reten- tion of virulence by certain (Dawson). p. 224 .....	A4.1:898
Preservation of, by pressure (Lawson). 1899. p. 27 .....	A1.9:105
Production—	
testing cows as to, some notes in connection with (Scovell). 1899. p. 123 .....	A10.3:65
type of dairy cow in relation to (Lawson). 1901. p. 28 .....	A1.9:124
Qualities in, science of developing and perpetuating (Roberts). 1882. p. 86 .....	A1.8:22
Quality of—	
selling on basis of, how shall it be accomplished in retail trade (Georgeson). 1896. p. 93 .....	A10.3:41
should selling be regulated by? (Voorhees). 1896. p. 91 .....	A10.3:41
Raw, pasteurized, and cooked, digestibility of. 1902. p. 27 .....	A1.9:149
Ropy cream and, examination as to cause of (Allen). 1899. p. 26.	A1.9:107
Solids and fat in, Babcock gravimetric method for determination of (drying with asbestos in perforated metal cylinder) (Winton). 1893. p. 119 .....	A7.3:38
Solids in, calculation of total from per cent of fat and specific gravity, according to formulas of Babcock, Fleischmann, and Hehner and Richmond, compared with gravimetric method (Van Slyke). 1894. p. 193 .....	A7.3:43
Sour, analysis of (Cooke). 1890. p. 22 .....	A7.3:31
Souring of, and other changes in milk products. 1895 .....	A1.9:29
Specific gravity of—	
determination of rise in, on allowing milk to stand after milk- ing (Richmond). 1894. p. 191 .....	A7.3:43
limits of (Schrodt). 1888. p. 154 .....	A7.3:24
Sterilization or pasteurization of, directions for .....	A4.4:1
Test, standard, report on (Patrick). 1891. p. 123 .....	A10.5:3
Testing cream and, modification of Babcock method and apparatus for (Bartlett). 1896. p. 104 .....	A7.3:49
Transportation of. 1887. p. 386 .....	A27.9:25
Tubercle bacilli in, experimental observations on presence of (Schroeder). 1894. p. 75 .....	A4.3:7
Tuberculosis in, killing the germs of (Wilcox). 1899. p. 24 .....	A1.9:107
Tuberculous cows, tubercle bacilli in, some experimental obser- vations on. 1893. p. 60 .....	A4.3:3
Use and adulteration of. 1893. p. 57 .....	A7.3:41
Washington, not normal (Richardson). 1888. p. 24 .....	A7.3:19
Water to, quantitative determination of addition of, and removal of cream therefrom (Herz). 1888. p. 168 .....	A7.3:24
See also Foremilk — Skim milk.	
Milk flour in Sweden. p. 610 .....	A4.1:901
Milking scrub cows. p. 491 .....	A4.1:898
Millardet, Pierre Marie Alexis. Grapes, mildew and rot of grapes, treatment of. 1885. p. 94 .....	A6.3:2
Millardet, Pierre Marie Alexis, and Gayon —:	
Copper, search for, on vines treated with lime and sulphate of cop- per mixture, and in harvest. 1885. p. 116 .....	A6.3:2
Grape mildew, treatment of, by mixture of sulphate of copper and lime. 1885. p. 108 .....	A6.3:2
Grape vine, mildew on, effects of, and influence of efficient treat- ment. 1885. p. 97 .....	A6.3:2

# Index

	Classification no.
Miller, Gerrit Smith, jr.:	
Bats, North American, of family Vespertilionidæ, revision of. 1897 .....	A5.5:13
Shrews, long-tailed, of eastern United States. 1895. p. 35.....	A5.5:10
Voles and lemmings, genera and subgenera of. 1896.....	A5.5:12
Miller, H. K. Acid, normal, and alkali solutions, standardization of. 1894. p. 145.....	A7.3:43
Miller, Howard. Kansas and Colorado, arid regions of, possibility of reclamation of, by utilizing underlying waters. 1891. pt. 1. p. 301.....	A15.2:Ir7 <sup>2</sup>
Miller, M. F. <i>See</i> , as joint author, Lapham, J. E.	
Miller, Merritt Finley. Reaping machines, evolution of. 1902.....	A10.3:103
Miller, Wm. B. E. Pleuro-pneumonia in New Jersey, investigation of. p. 45 .....	A1.1:881-2
<i>See also</i> , as joint author, McLean, L.	
Miller, W. W. Ohio, farmers' institute work accomplished in. 1902. p. 41 .....	A10.3:120
Millet disease of horses. 1898. p. 20.....	A1.9:69
Same, p. 539.....	A4.1:898
Millets:	
Composition of other forage plants and. 1898. p. 655.....	A1.10:898
Insect injury to (Chittenden). 1888. p. 84.....	A9.6:17
Report on (Williams). 1898. p. 267 .....	A1.10:898
<i>same</i> .....	A1.9:101
Milliken, Robert. Cricket, western, outbreaks of, and of certain locusts in Idaho, report on. 1893. p. 17.....	A9.7:6
Milling, Hungarian, report on (Dewey). 1893. p. 38 .....	A27.9:31
Milling companies, farmers'. 1890. p. 294 .....	A27.9:28
Mills, James. Response to address of welcome, American Association of Farmers' Institute Workers, held at Buffalo, N. Y., Sept. 18 and 19, 1901. 1902. p. 12 .....	A10.3:110
Milne seismograph, records by (Abbe). 1899. p. 214 .....	A29.6:27
Milner, R. D. <i>See</i> , as joint author, True, Alfred Charles.	
Milton, Mass. <i>See</i> Blue Hill Meteorological Observatory.	
Milwaukee, Wis.:	
Corn and wheat in, 1861-66. p. 431 .....	A27.9:4
Weather Bureau officials' convention, notes on (Abbe). 1901. pp. 25, 317 .....	A29.6:29
Mimosa bark or wattle bark, report on. p. 507.....	A1.1:878
<i>See also</i> Wattle tree.	
Mineral conditions and resources of U. S. (Newton). 186?.....	A1.8:1
Mineral constituents of tubercle bacilli (De Schweinitz and Dorset). p. 302.....	A4.1:898
Mineral fertilizers. <i>See</i> Fertilizers.	
Mineral food of plants. 1870. p. 40 .....	A27.9:8
Mineral matter deposited with snow in northern Indiana, Jan. 8, 1892 (Goss). p. 20 .....	A29.6:20
Mineral nutrients, physiological rôle of (Loew) .....	A28.3:18
Mineral phosphates:	
As fertilizers (Wiley). 1894. p. 177 .....	A1.10:894
Iron and alumina in, estimation of (Lehmann). 1897. p. 61....	A7.3:51
Mineral production, British. 1873. p. 531.....	A27.9:12
Mink, special report on (Merriam). p. 488 .....	A1.1:888
Same, p. 488.....	A5.1:888
Minneola, Kansas, sorghum-sugar experiments at, 1889 (Wiley).....	A7.3:26
Minnesota:	
Farm resources and products of. 1868. p. 198.....	A27.9:6
Flax culture in (Bosse). 1892. p. 43.....	A11.5:4
Flour, improved (Buck). p. 388 .....	A1.1:875
Horticultural education in (Green). 1898. p. 84.....	A10.3:49
Isaria and attendant pachybasium, note on species in (MacMillan). 1891. p. 75.....	A28.5:6
Locusts, migratory in, in 1891 (Lugger). p. 18.....	A9.3:27
Mammals and birds of parts of, food habits and distribution of (Bailey). p. 426 .....	A1.1:887
<i>same</i> . p. 426.....	A5.1:887
Resources of, etc., brief history of (Kelly). p. 31.....	A1.1:863

**Minnesota—Continued**

Road building in, State aid to (Choate). 1898.....	A22.4:32
Russian thistle and other troublesome weeds in wheat region of. 1893 .....	A1.9:10
Southern, blackbirds and gophers in, depredations of, in fall of 1887 (Fisher). p. 454.....	A1.1:887
same. p. 454.....	A5.1:887
Wheat crop of— 1865. p. 12 .....	A27.9:4
1869. p. 144 .....	A27.9:7
1887. p. 631 .....	A27.9:25
Winds and clouds in, movements of (Abbe). 1897. p. 252.....	A29.6:25
<i>See also</i> Duluth—Hennepin County.	
Minnesota, University of, bread and bread making at, studies on, in 1897 and 1898 (Snyder). 1899. p. 7. ....	A10.3:67
Same. 1899 and 1900 (Snyder). 1901 .....	A10.3:101
Minnesota good roads convention, St. Paul, proceedings of, Jan. 25, 26, 1894 .....	A22.3:2
Minnesota State fair, St. Paul. 1872. p. 347.....	A27.9:10
Minnetonka, Lake, watershed, hydrology of (Cooley). 1899. p. 14.	A29.6:27
Minot, Charles Sedgwick, and Burgess, Edward. Aletia, anatomy of. 1885. p. 45.....	A8.1:4
Minto, John. <i>See</i> , as joint author, Heath, H. A.	
<b>Mirage:</b>	
Note on (Abbe). 1900. p. 17.....	A29.6:28
Over Lake Michigan, notes on (Abbe). 1900. p. 544.....	A29.6:28
Mirobia and seiches, notes on (Abbe). 1898. p. 562 .....	A29.6:26
Same (Abbe). 1899. p. 102.....	A29.6:27
<b>Mississippi:</b>	
Aletia in, in 1878 (Anderson). p. 352.....	A9.2:C82
Boll worm in, observations on (Mullen). 1893. p. 240.....	A9.7:5
Climate, soil, productions, and agricultural capabilities of (Hurt). 1884 .....	A1.7:3
Cotton in. 1866. p. 233.....	A27.9:4
Cotton insects found in, notes on (Ashmead). 1894. pp. 25, 240, 320 .....	A9.7:7
Delta of, differential grasshopper in (Morgan). p. 7.....	A9.6:30
Entomological work of season in (Weed). 1891. p. 34 .....	A9.7:4
Experiment station (Tracy). p. 378 .....	A1.1:890
same, p. 378 .....	A6.1:890
Farm resources and products of. 1868. p. 111 .....	A27.9:6
Hurricane on coast of, Aug. 13-16, 1901.....	A29.2:H94
Insects from, notes on (Weed). 1892. p. 110.....	A9.7:5
Stock raising in. 1869. p. 297* .....	A27.9:7
Tea plant in. 1869. p. 301* .....	A27.9:7
Tornadoes in (Emery). 1900. p. 499 .....	A29.6:28
same (Emery). 1902. p. 265 .....	A29.6:30
Winter thunderstorms in, note on (Abbe). 1900. p. 18 .....	A29.6:28
<i>See also</i> Yazoo.	
Mississippi rapids, fruit culture on the (Gregg). 1869. p. 225 .....	A27.9:7
<b>Mississippi River:</b>	
Canal from, to Lake Borgne. 1870. p. 357 .....	A27.9:8
Cattle interests west of (Grinnell). p. 233.....	A4.1:884
same (Bradley). p. 424 .....	A4.1:885
same (Taylor). p. 306 .....	A4.1:887-8
Flood, Apr. 12, 1897.....	A1.5:2
same, 2d report, Apr. 22, 1897 .....	A1.5:3
Flood and flood problems of (Frankenfield). 1899. p. 405 .....	A29.6:27
Flood planes of (Ockerson). 1894. p. 81.....	A29.3:11 <sup>1</sup>
Floods of (Morrill). 1897.....	A29.5:E
same (Morrill). 1897. p. 371.....	A29.1:897
same, with reference to inundation of alluvial valley (Star- ling). 1894. p. 68.....	A29.3:11 <sup>1</sup>
June rise of, note on (Abbe). 1900. p. 208.....	A29.6:28
Live-stock industry west of, condition of (Wilson). p. 429.....	A4.1:885

\* By a misprint, this page number appears twice.



# Index

Classification no.

## Mississippi River—Continued

River and flood service, charts of area covered by, in April, 1897.. A29.2:R52<sup>2</sup>  
 Sheep industry west of, condition of (Heath). p. 247..... A4.1:889-90

Mississippi River and tributaries in periods of low water, importance  
 of river-stage forecasts of (Smyth). 1902. p. 146 ..... A29.3:31

## Mississippi Valley:

Bird migration in, in 1884 and 1885 (Cooke). 1888..... A5.3:2  
 Chinch bug in, early occurrence of (Forbes). 1889. p. 249..... A9.7:1  
 Droughts in (Abbe). 1895. p. 337..... A29.6:23  
 Forestry of (Baker). 1883..... A1.8:28  
 Lower, anthrax in. p. 166..... A4.1:897  
 Mineral fertilizers of. p. 548..... A1.1:869  
 Prairie ground squirrels or spermophiles of (Bailey). 1893..... A5.3:4  
 Spermophiles and pocket gophers of (Bailey). p. 185..... A1.1:892  
 same, p. 185 ..... A5.1:892

## Upper—

river gages in (Carlisle). 1902. p. 222 ..... A29.3:31  
 weather conditions in, effect of low atmospheric pressure in  
 determining (Hazen). 1896. p. 89..... A29.6:23

## Missouri:

Bread and meat consumption in, data relating to (Gibson and  
 others). 1896..... A10.3:31  
 Cattle in, outbreak of disease among (Michener). p. 387..... A4.1:889-90  
 Climate of, notes on (Hackett). 1899. p. 582..... A29.6:27  
 Climatic divisions of, note on (Abbe). 1900. p. 160 ..... A29.6:28  
 Dairy industry in (Chubbuck). 1897..... A4.3:18  
 Farm resources and products of. 1868. p. 263..... A27.9:6  
 Hailstorm in, severe (Hackett). 1898. p. 409 ..... A29.6:26  
 Insects of. See Murtfeldt, Mary E.  
 Moving cattle from two northern tiers of counties in Arkansas  
 into. Mar. 8, 1899..... A4.5:32  
 Northwest, grasshopper injuries in, report on trip to investigate  
 (Osborn). 1893. p. 323..... A9.7:5  
 Road improvement in, extract from governor's message (Ste-  
 phens). p. 5..... A22.4:33  
 Southwest, drought of 1899 in. (Hazen.) p. 151 ..... A29.6:28  
 Swine and fowl industry of, and annual loss by disease (Bradley).  
 p. 418 ..... A4.1:885  
 Weather forecasts of (Frankenfield). 1895. p. 292 ..... A29.6:23  
 Winds in, hot (Abbe). 1897. p. 260..... A29.6:25  
 See also Jefferson County — Kirkwood — Miami — St. Louis —  
 Springfield.

Missouri, University of, dietary studies at, in 1895 (Gibson and others).  
 1896 ..... A10.3:31

Same, comments on (Atwater and Woods). p. 21 ..... A10.3:31

Missouri Experiment Station, irrigation experiments at, 1901  
 (Waters). 1902. p. 305 ..... A10.3:119

## Missouri River:

June rise of, note on (Abbe). 1900. p. 208..... A29.6:28  
 Water from, abstract of laws for acquiring titles to (Mead). 1899.. A10.30:6  
 Water rights on (Mead). 1899 ..... A10.3:58

Mist, small whirling columns of (Marean). 1899. p. 409 ..... A29.6:27

## Mitchell, Alexander J.:

Climate and crop conditions, are changes in present forms for re-  
 porting weekly advisable? 1899. p. 126 ..... A29.3:24  
 Climatology of Florida with regard to crops. 1902. p. 208..... A29.3:31  
 State weather services, their importance and equipment. 1896.  
 p. 44..... A29.3:18  
 Weather forecast stations, voluntary, their object and collateral  
 functions. 1899. p. 140 ..... A29.3:24

Mitchell, A. S. Extracts, flavoring, analysis of, provisional methods  
 for. 1902. p. 69 ..... A7.3:65

## Mitchell, W. H.:

Clouds, cumulus, formed by smoke. 1901. p. 498 ..... A29.6:29  
 Kite corps at Bayonne, N. J., records by. 1900. p. 539 ..... A29.6:28  
 Meteorological observations during burning of plant of Standard Oil  
 Company at Bayonne, N. J., July 5, 6, and 7, 1900. p. 325 .. A29.6:28



<b>Mite:</b>	
Enemy of citrus trees (Marlatt). 1900. p. 247 .....	A1.10:900
Six-spotted, of orange (Riley). 1890. p. 225 .....	A9.7:2
<i>See also</i> Blister mite — Clover mite.	
Mlodziansky, A. K. Forest crop, measuring the. 1898.....	A13.3:20
<b>Moffat, Edmund J.:</b>	
Crop prospects of Europe. 1883. No. 61, p. 34; No. 64, p. 28; No. 65, p. 29; No. 1, p. 18 .....	A27.9:21
European wheat prospect, Apr., 1883. No. 58, p. 31 .....	A27.9:21
Grain producing districts of Russia. 1882. No. 51, p. 14 .....	A27.9:20
India, wheat crop of, 1884-85. 1885. No. 21, p. 39 .....	A27.9:23
Mohair and mohair manufactures (Thompson). 1901. p. 271.....	A1.10:901
Same, p. 480.....	A4.1:901
Mohair market. 1886. p. 555.....	A27.9:24
Mohler, John R. <i>See</i> , as joint author, Nørgaard, Victor Andreas.	
Mohn, Henrik. Norway, climate of. 1896. p. 647 .....	A29.3:11 <sup>a</sup>
<b>Mohr, Charles:</b>	
Plant life in Alabama; prepared in cooperation with geological survey of Alabama. 1901 .....	A6.5:6
Red cedar, notes on. 1901 .....	A13.3:31
Timber pines of southern United States. 1896.....	A13.3:13
Woods, test material, field records of. 1893. p. 50.....	A13.3:8
<b>Moisture:</b>	
Conditions, influence of, on process of germination (Detmer). 1895. p. 405 .....	A29.3:11 <sup>a</sup>
Determination of, experiments in (Anderson). 1890. p. 93.....	A7.3:28
Distribution of, in United States (Hazen). 1899. p. 327.....	A29.1:898
Monthly notes on, Feb., 1895-Sept., 1897 .....	A29.6:
Some physical properties of soils in relation to (Whitney). 1892.	A29.3:4
Tables of, report on (Marvin). 1898. p. 205 .....	A29.6:26
<i>See also</i> Atmospheric moisture — Soils.	
Mokrzhetzki, S. Blood louse, observations on cycle of sexual develop- ment of, translated by P. Fireman. 1898. p. 78 .....	A9.6:18
<b>Molasses:</b>	
Adulteration of sirup and (Wiley and others). 1892. p. 633.....	A7.3:13 <sup>b</sup>
Cuba, 1870-71. p. 326 .....	A27.9:9
Food for farm animals (Langworthy). 1899. p. 17.....	A1.9:107
Imports of, 1856-61. No. 5, p. 4.....	A27.9:1
Sorghum, statistics of, 1862-63. No. 5, p. 4 .....	A27.9:1
Table showing amount of, June, 1864. No. 3, p. 8 .....	A27.9:2
Trade of United States, 1867-68. p. 16 .....	A27.9:7
<i>See also</i> Sirup.	
Mole cricket or changa in Porto Rico (Barrett). 1902.....	A10.12:2
<b>Mollusks.</b> <i>See</i> Clam — <i>Limax campestris</i> .	
<b>Molossus</b> , new species of, from California, description of (Merriam). 1890. p. 31 .....	A5.5:4
<b>Molybdate</b> method, determination of phosphoric acid by (Garri- gues). 1894. p. 105.....	A7.3:43
<b>Molybdic</b> solution, estimation of phosphoric acid in soils by double precipitation with (Williams). 1895. p. 82.....	A7.3:47
Monaco, Prince of. <i>See</i> Albert, Prince of Monaco.	
Monchamp, G. Barometer, history of, letter relative to, comments on. 1899. p. 547 .....	A29.6:27
Monephora bicinta damaging Bermuda grass, note on. 1886. p. 34.	A9.3:12
Monocotyledons of western Texas, description of (Coulter). 1894. p. 421 .....	A6.5:2
Monomorium pharaonis, observations on (Bellevoye). 1890. p. 230.	A9.7:2
Monostegia ignota, report on (Mally). 1890. p. 9.....	A9.7:3
Monostomulum lentis. <i>See</i> Trematodes.	
Monrad, John H. Dairy industry in Nebraska, South Dakota, and North Dakota. 1896.....	A4.3:16
Monroe, Josiah. Rainfall at Firmeza, Cuba, 1888-98. p. 252.....	A29.6:26
Monroe County, Iowa, agricultural statistics of. 1869. p. 301*.....	A27.9:7
<b>Monsoon</b> rains:	
Forecasting (Abbe). 1895. p. 213 .....	A29.6:23

\* By a misprint, this page number appears twice.

# Index

	Classification no.
Monsoon rains—Continued	
Nile floods and. 1900. p. 324.....	A29.6:28
<i>See also</i> Indian monsoons.	
Monsoon region, Indian, upper currents of air above (Dallas). 1896. p. 417 .....	A29.6:24
Montague, A. J. Good roads, how to secure. 1902. p. 36 .....	A22.3:25
Montana:	
Agricultural notes on. 1866. p. 380.....	A27.9:4
Agricultural resources of. 1865. No. 9. p. 27 .....	A27.9:3
Agricultural topography and resources of. p. 431.....	A1.1:871
Alkali in (Traphagen). 1900. p. 72.....	A10.3:76
Chinook in (Abbe). 1895. p. 426 .....	A29.6:23
Cold spell of Nov., 1896, in (Hazen). p. 414.....	A29.6:24
Earthquakes in, notes on (Abbe). 1901. p. 175 .....	A29.6:29
Erysipheæ of, preliminary list of (Anderson). 1889. p. 188.....	A28.5:5
Forest conditions of Rocky Mountains in (Ensign). p. 41.....	A13.3:2
Fungi of, common, brief notes on few (Anderson). 1889. p. 30.	A28.5:5
Irrigation in, in 1890 (Nimmo). p. 149 .....	A15.2:P94 <sup>1</sup>
Irrigation investigations in (Fortier)—	
1900. p. 267 .....	A10.3:104
1901. p. 225 .....	A10.3:119
Kites in (Coe). 1896. p. 237 .....	A29.6:24
Pastoral resources of (Anderson). p. 311 .....	A1.1:888
same, p. 311 .....	A6.1:888
Plant poisoning of stock in (Wilcox). p. 91.....	A4.1:900
Stock-poisoning plants of, preliminary report (Chesnut and Wilcox). 1901.....	A6.3:26
Temperature changes in, sudden, note on (Abbe). 1900. pp. 115, 161 .....	A29.6:28
Water supply of, for season of 1900, as depending on snowfall (Glass). p. 495.....	A29.6:28
<i>See also</i> Gallatin Valley—Havre—Helena—Whitney, Milton, and Means, Thos. H.	
Monterey County, Cal. <i>See</i> Salinas Valley.	
Montevideo, wool exports from, in 1901. p. 607 .....	A4.1:901
Montgomery County, Maryland, Agricultural Society, address before (Capron). 1870. p. 351 .....	A27.9:870
Montgomery County, Ohio, soil survey of (Dorsey and Coffey). p. 85 .....	A26.5:900 <sup>1</sup>
Montgomery County, Tennessee, soil survey of (Lapham and Miller). p. 341.....	A26.5:901 <sup>1</sup>
Monthly crop synopsis, Statistics Division, Agriculture Department.	A27.7:
Monthly list of publications of Agriculture Department.....	A21.6:
Monthly Weather Review, French edition of, note on (Abbe). 1900. p. 291.....	A29.6:28
Monthly Weather Review, Weather Bureau .....	A29.6:
Montlaur, Amaury, Vicomte de. Polysulphides, alkaline, use of, for grape mildew. 1885. p. 67.....	A6.3:2
Moon:	
Aurora and, report on (Hazen). 1898. p. 108 .....	A29.6:26
Effect of, on vegetation, notes on (Kimball). 1901. p. 215.....	A29.6:29
Waltemath's (George), notes on (Abbe). 1898. p. 19.....	A29.6:26
Weather and, note on relation of—	
1898 (Abbe). p. 569.....	A29.6:26
1901 (Abbe). pp. 121, 374 .....	A29.6:29
1901 (Meech). p. 372 .....	A29.6:29
Mooney, Charles N., and Caine, Thomas N. Soil survey of Prince Edward area, Virginia. p. 259 .....	A26.5:901 <sup>1</sup>
Mooney, Charles N., Martin, F. O., and Caine, Thomas A. Soil survey of Bedford area, Virginia. p. 239.....	A26.5:901 <sup>1</sup>
Moonshine and frosts, notes on (Abbe). 1898. pp. 115, 261.....	A29.6:26
Moore, C. C. Plant food, available, plan for cooperating in study of. 1902 .....	A7.4:9
Moore, J. A. Lumpy jaw, successful treatment of. p. 510.....	A4.1:899
Moore, Veranus Alva:	
Animal diseases; morphology, biology, and pathogenic properties of 28 streptococci found in investigation of. 1893. p. 9.....	A4.3:3

	<b>Index</b>
	<b>Classification no.</b>
<b>Moore, Veranus Alva—Continued</b>	
Animals, domesticated, upper air passages of, pathogenic and toxicogenic bacteria in. 1893. p. 38 .....	A4.3:3
Cattle, disease in, not distinguishable from rabies. 1896. p. 10..	A4.3:10
Cornstalk disease of cattle, nature, cause, and means of preventing, investigation into. 1896. p. 9.....	A4.3:10
Fowl cholera, bacillus obtained from three outbreaks of, study of. 1895. p. 63 .....	A4.3:8
Fowls, diphtheria in, preliminary investigation of. 1895. p. 39.	A4.3:8
Hog cholera, can bacillus of, be increased in virulence by passing it through a series of rabbits? 1894. p. 97.....	A4.3:6
Hog-cholera and swine-plague bacteria, what becomes of, injected in small numbers into subcutaneous tissue of pigs. 1894. p. 103 .....	A4.3:6
Leukæmia, infectious, in fowls, a bacterial disease frequently mistaken for fowl cholera. p. 185 .....	A4.1:895-6
Milk, freshly drawn, number and nature of bacteria in, preliminary investigations concerning. p. 261.....	A4.1:895-6
Milk separators, inefficiency of, in removing bacteria. 1895. p. 431 .....	A1.10:895
Nodular tæniasis in fowls. 1895 .....	A4.4:3
Pig, lung and spleen of, nonmotile pathogenic bacillus closely resembling bacillus of hog cholera found in. 1893. p. 31 ....	A4.3:3
Pigeons, fatal disease of, pathogenic bacillus of hog-cholera group associated with. 1895. p. 71 .....	A4.3:8
Swine, nonspecific disease among, outbreak of. p. 219.....	A4.1:895-6
Turkeys, infectious entrohepatitis in, direct transmission of. 1896 .....	A4.4:5
<i>See also</i> , as joint author, Smith, Theobald.	
Moore, Veranus Alva, and Dawson, Charles Francis. Tuberculosis in swine; nature of disease, with report of three cases. p. 207.	A4.1:895-6
Moore, Veranus Alva, and Fish, Pierre Augustine. Rabies in Washington, D. C. p. 267.....	A4.1:895-6
<b>Moore, W. H.:</b>	
Address of—	
at international good roads congress, held at Buffalo, N. Y., Sept. 16-21, 1901. p. 5 .....	A22.3:21
before Jefferson memorial and interstate good roads convention, Apr., 1902. p. 21.....	A22.3:25
Good roads and material progress. 1902. p. 26 .....	A22.3:23
Road subject, social, commercial, and economic phases of. 1900 .	A22.4:34
What is our duty? Address before international good roads congress, Buffalo, N. Y., Sept. 21, 1901. p. 82.....	A22.3:21
<b>Moore, Willis Luther:</b>	
Address before convention of Weather Bureau officials, Omaha, Nebr., Oct. 13, 1898. p. 9.....	A29.3:24
Alaska, climate of. 1897.....	A29.2:A11
Arid regions, some climatic features of, communicated to national irrigation congress. 1896.....	A29.2:Ar4
Atmospheric survey, United States daily. 1897.....	A29.2:At6 <sup>2</sup>
August weather. 1900. p. 343.....	A29.6:28
North Pacific coast weather map, explanation of .....	A29.2:N81
President's address before second convention of Weather Bureau officials, Milwaukee, Wis., Aug. 27-29, 1901. p. 16.....	A29.3:31
Weather Bureau, Agriculture Department—	
new work in. 1898. p. 81.....	A1.10:898
report of. 1901. p. 595 .....	A29.6:29
work of, for farmer. 1897. p. 59.....	A1.10:897
Weather forecasting; some facts, historical, practical, and theoretical. 1899.....	A29.3:25
Weather map, explanation of.....	A29.2:W37 <sup>6</sup>
West Indian hurricane service. 1899. p. 56 .....	A29.3:24
<i>See also</i> , for reports as Chief, Weather Bureau, Agriculture Department, 1895-1902 .....	A29.1
Moorhead, J. K., Warder, Jno. A., and Jackson, Chas. Report of Flax and Hemp Commission. 1865.....	A1.2:F76

# Index

Classification no.

Morachevski, V. Russian zymstvos, conflict of, with enemies of agriculture; abstract by P. Fireman. 1902. p. 61.....	A9.6:38
Morelos orange fruit-worm, report on (Riley). 1888. p. 45.....	A9.7:1
Morgan, H. A.:	
Artace punctistriga, some observations upon. 1901. p. 182.....	A10.3:99
Grasshopper, differential, in Mississippi delta; other common species. p. 7. 1901.....	A9.6:30
Mosquito, conchyliastes musicus, observations upon. 1902. p. 113.	A9.6:37
Oil emulsions, simple device for preparation of. 1896. p. 93....	A9.6:6
Sugar-cane borer, life history of, in Louisiana. 1902. p. 128....	A10.3:115
Morocco, agriculture of (Collins). p. 499.....	A1.1:862
Morrell, Robert. Sheep, Hampshire Down, note on. 1868. p. 462.	A27.9:868
Morrill, Justin Smith:	
Legislative career of (Atherton). 1901. p. 60.....	A10.3:99
Resolutions of respect for, proposed for adoption of Association of American Agricultural Colleges and Experiment Stations, at 13th annual convention (Buckham). 1900. p. 30.....	A10.3:76
Morrill, Park:	
Areas, high and low. 1895. p. 157.....	A29.6:23
Barometric pressure, reduction of, to sea level. 1896. p. 492...	A29.6:23
Daily stages of principal rivers of United States. Pt. 5, 1893-95..	A29.10:5
Floods of Mississippi River, report on. 1897.....	A29.5:E
same. p. 371.....	A29.1:897
Meteorological records, hourly, at Pikes Peak and Colorado Springs from November, 1892, to September, 1894, brief discussion of. 1896. p. 215.....	A29.1:896
River and flood service, monthly notes on, Nov., 1896-May, 1898.	A29.6:24
Temperature and pressure, reduction of. 1897. p. 572.....	A29.6:25
Weather forecasts and storm warnings, notes on, May, 1898. p. 195.....	A29.6:26
Morrill, Park:	
Published works of (Abbe). 1898. p. 356.....	A29.6:26
Short biography of (Garriott). 1898. p. 356.....	A29.6:26
Morris, Francis. Cavalry horses in America. p. 159.....	A1.1:863
Morris, John G. Ailanthus silk-worm of China, additional observations on. p. 390.....	A1.1:862
Morris, Paschall:	
Piggery, model, plan of. p. 476.....	A1.1:865
White Chester breed of swine. p. 475.....	A1.1:865
Morrisville, Va., sorghum-sugar experiments at, 1889 (Wiley). p. 20.....	A7.3:26
Same (Maxwell). p. 63.....	A7.3:26
Morrow, George E.:	
Address as acting president of Association of American Agricultural Colleges and Experiment Stations, at 8th annual convention, 1894. 1895. p. 25.....	A10.3:24
Agricultural experiment station records, report on. 1891. p. 102.	A10.5:3
Agricultural experimental work, relation of teaching to. 1891. p. 67.....	A10.3:7
Animal husbandry in central West. 1882. p. 62.....	A1.8:22
Beef, breeding and feeding for. 1883. p. 127.....	A1.7:2
Butter, composition of, from Chicago dairy show, December, 1889. p. 188.....	A7.1:889
Cattle and swine rearing and feeding in United States, report accompanying exhibit of Animal Industry Bureau, at Paris Exposition of 1889. p. 405.....	A4.1:887-8
Chicago, Ill., World's Agricultural Congress, report of committee on. 1893. p. 104.....	A10.3:16
Morse, Eldridge. Tide lands of Washington Territory. 1885. p. 62.	A1.7:7
Morse, Fred W. Phosphoric acid, insoluble, paper on. 1891. p. 106.....	A7.3:31
Morse, Geo. W. Cotton caterpillar, letter on. 1867. p. 249.....	A27.9:5
Morse, H. N., and Burton, W. M. Butter, oleomargarine, etc., analysis of, method for. 1890. p. 99.....	A7.3:24
Mortgage, a burden upon agriculture. 1886. p. 189.....	A27.9:24
Morton, Julius Sterling:	
Address before Association of American Agricultural Colleges and Experiment Stations. 1895. p. 47.....	A10.3:24

	<b>Index</b>
	<b>Classification no.</b>
<b>Morton, Julius Sterling—Continued</b>	
Arbor Day; its origin and growth. 1887. p. 22.....	A1.8:56
See also for reports as Secretary of Agriculture, 1893-1896 .....	A1.1
Mosaic disease of tobacco (Woods). 1902 .....	A19.3:18
Moses, Alfred G. Public improvement, citizens' duty to. 1902. p. 36 .....	A22.3:23
Moses, Z. Teasel, cultivation and use of. p. 117.....	A1.1:863
Möslinger, Dr. Milk, diphenylamine reaction in examination of, significance of. 1889. p. 168 .....	A7.3:24
<b>Mosquito:</b>	
Conchyliastes musicus, observations on (Morgan). 1902. p. 113.	A9.6:37
Experiment against (Howard)—	
1892. p. 12 .....	A9.7:5
1893. p. 90 .....	A9.7:6
How to distinguish different, of North America (Howard). .	A9.5:40
North American, synoptic tables of (Coquillett). 1900. p. 4....	A9.5:40
Notes on (Howard). 1898. p. 55 .....	A9.6:17
Report on (Howard). 1896. p. 9.....	A9.6:4
Some experience with (Weed). 1894. p. 212.....	A9.7:7
Structure and biology, notes on, with remarks on remedies (Howard). 1900 .....	A9.6:25
Mosquitoes and fleas, circular relative to (Howard) .....	A9.5:13
Moss, Irish, curing of, brief account of (Bates). p. 423 .....	A1.1:866
Mosses from Fuegia and Patagonia, collected by U. S. S. Albatross in 1887-91, list of (Eaton). 1892. p. 138 .....	A6.5:1
<b>Moths:</b>	
Egeriidæ of central Ohio, notes on (Kellicott). 1892. p. 81 ....	A9.7:5
Fruit seriously injured by (Mally). 1902. p. 90 .....	A9.6:31
See also Angoumois grain moth—Bombycidæ—Brown-tail moth—Cabbage moth—Calothysanis amaturaria—Clothes moths—Commelina owlet moth—Drasteria erechtea—Endi-opta owlet moth—Ephestia interpunctella—Geometrid moth—Gipsy moth—Grain moth—Hepialus argenteomac-ulatus—Herbarium pest—Leopard moth—Lepidoptera—Lepidopterous larvæ—Mediterranean flour moth—Noctui-dæ—Oncocnemis—Orgyia leucostigma—Osage orange pyra-lid—Peach-tree borer—Porthetria dispar—Potato-tuber moth—Privet web-worm—Protoparce carolina—Pyrallid—Pyrallidæ—Pyrallidina—Spilosoma fuliginosa—Sphingidæ—Squash borer—Sugar cane borer—Theophila mandarina—Tussock moth—Wood-leopard moth.	
Moule's earth-closet system, report on. p. 465 .....	A1.1:871
Mount, James A. Indiana, road improvement in, extract from gov-ernor's message. p. 3.....	A22.4:33
Mount. See name of mountain.	
Mountain peaks, minimum temperatures on (Abbe). 1899. p. 421.	A29.6:27
Mountain roads. See Roads.	
Mountain shadow, photograph of, note on (Abbe). 1894. p. 510..	A29.6:22
Mountain slopes, precipitation on, theory of formation of (Pockels). 1901. pp. 152, 306.....	A29.6:29
Mountain stations, study of upper atmosphere from observations on (Hann). 1896. p. 754.....	A29.3:11 <sup>s</sup>
Mountain storms, peculiar, notes on (Abbe). 1898. p. 66.....	A29.6:26
<b>Mountains:</b>	
Effect of, on wind (Abbe). 1894. p. 510.....	A29.6:22
Relation of rainfall to (Alexander). 1901. p. 6.....	A29.6:29
See also Appalachian—Cascade—Coeur d'Alene.	
Mouse. See Evotomys—Grasshopper mouse—Jumping mice—Pocket mice.	
Mouth disease of cattle. See Foot-and-mouth disease of cattle.	
Mouton flandrins sheep, Texel sheep or, report on (Chenery). p. 242.	A1.1:864
Muck or peat, value of. 1901. p. 5 .....	A1.9:149
See also Soils.	
Mucronoporus, report on (Ellis and Everhart). 1889. p. 90.....	A28.5:5
Same, new (Ellis and Galloway). 1889. p. 141.....	A28.5:5
Mucronoporus Andersoni, report on (Ellis and Everhart). 1891. p. 79 .....	A28.5:6



# Index

	Classification no.
Mud, rains of, notes on (Abbe). 1899. p. 158.....	A29.6:27
Mueller, Charles. Cattle, Dutch or Holstein. 1873. p. 175.....	A27.9:11
Muhlenberg, H. Grasses of herbarium of (Scribner and Merrill). 1900 .....	A3.4:27
Mulberries, birds which feed on (Merriam). p. 285 .....	A1.1:890
Same, p. 285.....	A5.1:890
Mulberry silkworm, report on (Riley) .....	A9.3:9
See also Silkworm.	
Mulder, Emile. Tobacco, cultivation of, in Sumatra. 1898 .....	A1.8:58
Mules:	
Diseases of, correspondence relating to. 1898. p. 537 .....	A4.1:1898
Glanders among, in Texas (Folsetter). p. 393.....	A4.1:889-90
Raising (Warder). p. 180 .....	A1.1:863
Uses, how to breed, grow, prepare for market, and sell (Jones). p. 335.....	A4.1:891-2
See also Farm animals.	
Mull, George. Arbor Day, value and uses of. p. 29.....	A1.8:56
Mullen, S. B. Boll worm, observations on, in Mississippi. 1893. p. 240.....	A9.7:5
Munich, Germany, cost of hauling farm products over wagon roads at (Steiner). p. 9 .....	A22.4:27
Munich, international conference of meteorologists, Aug., 1891, re- port of (Abbe). p. 626 .....	A1.1:891
Same, p. 626.....	A29.1:891 <sup>2</sup>
Munich, meteorological congress, 1892; international weather sym- bols recommended for use (Harrington).....	A29.2:In8
Munroe, Ralph M. Pineapple fiber, results of recent investigations relating to. 1893. p. 46.....	A11.5:5
Munson, L. S. Canned vegetables, analysis of, provisional method for. 1902. p. 50 .....	A7.3:65
See also, as collaborator, Bigelow, Willard Dell.	
Munson, L. S., and Tolman, L. M.:	
Fruits and fruit products—	
analysis of, provisional method for. 1902. p. 74.....	A7.3:65
chemical examination of. 1902. p. 9 .....	A7.3:66
Munson, T. V.:	
Grape-vine, downy mildew and black-rot of, treatment of, with salts of copper at Denison, Texas, in 1887. p. 23 .....	A6.3:5
Grapes, wild, of North America, classification and generic syn- opsis of. 1890.....	A20.3:3
Muntz, A. Grape mildew, treatment of, by sulphate of copper. 1886. p. 92 .....	A6.3:2
Murdoch, L. H.:	
Precipitation, cycles of. 1902. p. 482 .....	A29.6:30
Utah, water supply of, for season of 1900, as depending on snow- fall. p. 497.....	A29.6:28
Water level of Great Salt Lake, relation of, to precipitation. 1901. p. 22 .....	A29.6:29
Muriate of potash. See Potash.	
Murkland, Charles S. Engineering experiment stations, report of committee on, before convention of American agricultural col- leges and experiment stations. 1898. p. 32.....	A10.3:65
Same. 1900. p. 40 .....	A10.3:99
Murphy, Charles J. Maize, introduction of, into Europe. 1891. p. 5.....	A1.8:49
Murphy, J. McLeod. Ixtle fiber, letter on. 1869. p. 232 .....	A27.9:7
Same, 1870. p. 354 .....	A27.9:8
Murray, A. J.:	
Cattle—	
digestive organs of, diseases of. p. 15.....	A4.2:C29 <sup>2</sup>
medicines to, administration of. p. 9 .....	A4.2:C29 <sup>2</sup>
Murray, Charles B. Remarks of, at 2d convention of Weather Bu- reau officials, Milwaukee, Wis. 1901. p. 224 .....	A29.3:31
Murtfeldt, Mary E.:	
Acorn insects, primary and secondary. 1894. p. 318 .....	A9.7:6
Cheese or meat skipper. 1893. p. 170.....	A9.7:6
Drought, heat, and insect life. 1902. p. 97.....	A9.6:31



<b>Murtfeldt, Mary E.—Continued</b>	
Entomological memoranda for 1893. 1894. p. 257 .....	A9.7:6
Grape bags, use of, by paper-making wasp. 1891. p. 192.....	A9.7:4
Graptodera foliacea, life-history of. 1888. p. 74 .....	A9.7:1
<b>Missouri, injurious insects for season—</b>	
1886. p. 59 .....	A9.3:13
1888. p. 133 .....	A1.1:888
same, p. 133 .....	A9.1:888
1889. p. 73 .....	A9.3:22
1890. p. 45 .....	A9.3:23
1891. p. 36 .....	A9.3:26
1892. p. 49 .....	A9.3:30
1893. p. 37 .....	A9.3:32
Osage orange pyralid, report of. 1893. p. 155.....	A9.7:5
Pyrethrum, experiments with, at Kirkwood, Mo. p. 85 .....	A1.1:881-2
Same, p. 85 .....	A9.1:882
Screw worm, hominivorous habits of, in St. Louis. 1891. p. 200.	A9.7:4
Stibadium spumosum, habits of. 1894. p. 301 .....	A9.7:6
Tineid, interesting, report on. 1890. p. 303 .....	A9.7:2
Tree crickets, carnivorous habits of. 1889. p. 130 .....	A9.7:2
Muscatel raisins, production of, in Malaga (Mark). 1875. p. 319 ..	A27.9:13
Muscular energy, source of, metabolism of nutrients in animal body and (Zuntz). 1897. p. 538 .....	A10.6:7
<b>Muscular work:</b>	
Experiments on effect of, upon digestibility of food and metabo- lism of nitrogen, conducted at University of Tennessee, 1897- 99 (Wait). 1901.....	A10.3:89
Experiments on effect of, upon digestibility of food and metabo- lism of nitrogen (Wait). 1902.....	A10.3:117
Severe and prolonged, effect of, on food consumption, digestion, and metabolism (Atwater and Sherman). 1901.....	A10.3:98
<b>Mushrooms:</b>	
As food. 1898. p. 18.....	A1.9:79
Beds for, directions for preparing and spawning of (Falconer). p. 17 .....	A18.5:1
Edible and poisonous, reference list of publications relating to (Clark). 1898.....	A17.3:20
Eight edible and twelve poisonous, of United States, with direc- tions for culture and culinary preparation of edible species (Taylor). p. 366 .....	A1.1:890
same, revised .....	A18.5:2
Enemies of, and experiments with remedies, notes on (Busck). 1902. p. 32 .....	A9.6:38
Four edible, of United States (Taylor). 1893. p. 7 .....	A18.5:3
How to grow (Falconer). 1897.....	A1.9:53
Poisoning by, in District of Columbia, recent cases of (Coville)...	A6.4:13 <sup>1</sup>
Review of industry (Falconer). 1894. p. 20.....	A18.5:1 <sup>2</sup>
Twelve edible, of United States, with directions for identification and preparation as food (Taylor). p. 100 .....	A1.1:885
same, reprinted with an appendix.....	A18.5:1
See also Agarics — Agaricus campestris — Fungi.	
Musk ox (Thompson). p. 507.....	A4.1:901
<b>Muskmelons:</b>	
Fertilization of, by insects, notes on (Rane). 1898. p. 75.....	A9.6:17
Transplanting, experiments in (Smith). 1900. p. 20 .....	A1.9:119
Transplanting and manuring. 1902. p. 15.....	A1.9:149
<b>Mustard:</b>	
Tumbling, circular on (Dewey) .....	A6.4:7 <sup>1</sup>
White and black, contribution to investigation of assimilation of free atmospheric nitrogen by (Lotsy). 1894 .....	A10.3:18
Mustard family, three new weeds of (Dewey). 1897 .....	A6.4:10
<b>Mustela caurina. See Marten.</b>	
<b>Mutton:</b>	
Feeding for, in South Dakota (Chilcott and Burnett). p. 471....	A4.1:898
Raising sheep for (Curtiss). 1899.....	A1.9:96
<b>See also Sheep.</b>	

# Index

Classification no.

Mycological literature, North American, index to (Fairchild). 1891. pp. 42, 80, 128, 184.....	A28.5:6
Same, continued (Fairchild). p. 52.....	A28.5:7
Mycological notes, report on (Massee). 1889. p. 184.....	A28.5:5
Same (Massee). 1891. p. 178.....	A28.5:6
Mycological Section, Agriculture Department, report of. p. 95.....	A1.1:886
Mycology, journal of, devoted to study of fungi, especially in their relation to plant diseases.....	A28.5
Mycophagy, importance of, in a course of botanical instruction (Starnes). 1898. p. 75.....	A10.3:49
Myers, E. W. See, as joint author, Pressey, H. A.	
Myers, John A: Address of, as president of Association of Official Agricultural Chemists, at sixth annual convention. 1889. p. 8.....	A7.3:24
Agricultural experiments stations, organization and methods. 1889. p. 99.....	A10.5:1
Biographical sketch of. 1902. p. 72.....	A7.3:67
Brief recollections of (Shinn). 1902. p. 67.....	A7.3:67
Memorial exercises in honor of. 1902. p. 65.....	A7.3:67
Resolutions adopted by Association of Official Agricultural Chem- ists in commemoration of. 1902. p. 74.....	A7.3:67
Myers, U. G.: Klondike, Weather Bureau observations in. 1898. p. 209.....	A29.6:26
Meteorology of Yukon, report on. 1899. p. 100.....	A29.6:27
Yukon weather, report on. 1901. p. 309.....	A29.6:29
Myrick, Herbert. New England, associated dairying in, report accompanying exhibit of Animal Industry Bureau at Paris exposition of 1889. p. 375.....	A4.1:887-8
Myriopods, phosphorescent, report on. 1891. p. 319.....	A9.7:3
Mytilaspis pomorum, new parasite of (Howard). 1894. p. 256.....	A9.7:7
Nagana, or tsetse-fly disease (Kanthack and others). p. 140.....	A4.1:901
Nagle, J. C.: Engineering courses, some objections to early differentiation of. 1900. p. 106.....	A10.3:76
Silt measurements, progress report on— 1891. p. 293.....	A10.3:104
1902. p. 365.....	A10.3:119
Nall, I. B. Kentucky Farmers' Institute, work accomplished in. 1902. p. 23.....	A10.3:120
Napa County, California, wine industry of (Husman). 1891. p. 535.....	A27.9:29
Napthaline, as an insecticide, etc., its effect on seeds, plants, and animals (Taylor). 1883.....	A18.2:N16
Nash, George V. American ginseng, its commercial history, protec- tion, and cultivation.....	A6.3:16 <sup>1</sup>
Same, revised, and extended by Maurice Grenville Kains.....	A6.3:16 <sup>2</sup>
National Bureau of Standards, circular of information relating to (Marvin). 1902. p. 135.....	A29.6:30
National herbarium, contributions from.....	A6.5:
National League for Good Roads. See Roads, good, national league for.	
National road conference. See Asbury Park, N. J.	
National road parliament. See Road parliament.	
Natural history: Queen Charlotte Islands, British Columbia, and Cook inlet region, Alaska (Osgood). 1901.....	A5.5:21
Scientific notes on. 1870. pp. 155, 438.....	A27.9:8
Tres Marias Islands, Mexico. 1899.....	A5.5:14
See also Names of animals.	
Naval engineering, bill to establish and maintain courses in, report of committee of Association of American Agricultural Colleges and Experiment Stations on. 1896. p. 33.....	A10.3:41
Naval-store industry. 1896. p. 67.....	A13.3:13 <sup>1</sup>
Same, with additional note of Aug. 5, 1896. p. 67.....	A13.3:13 <sup>2</sup>
Navigation: Inland, monthly notes on, July, 1891-Oct., 1896.....	A29.6:
Work of meteorologist for benefit of (Bigelow). 1899. p. 71.....	A1.10:899
Navigator, marine nephoscope and its usefulness to (Abbe). 1894. p. 161.....	A29.3:11 <sup>1</sup>

**Index**  
Classification no.

Neal, J. C.:	
Cotton and orange insects, report of observations and experiments. 1883. p. 31 .....	A9.3:1
Root-knot disease of peach, orange, and other plants in Florida, due to work of anguillula. 1889 .....	A9.3:20
Tornado cloud of March 4, 1894. p. 127 .....	A29.6:22
Vegetation, insects destructive to, general observations on. 1883. p. 35 .....	A9.3:1
Neale, Arthur T.:	
Anthrax in Delaware, combating. p. 190 .....	A4.1:897
Cerebro-spinal meningitis in horses. p. 470 .....	A4.1:899
Sorghum analysis at Rio Grande, N. J., in 1888. p. 43 .....	A7.3:20
Nealley, G. C.:	
Collection of plants made by, in the region of Rio Grande, Texas, from Brazos Santiago to El Paso County (Coulter). 1890. p. 29 .....	A6.5:1
Forage plants of western Texas, investigation of. 1888. p. 30...	A6.3:6
Neat cattle. See Cattle.	
Nebraska:	
Agriculture in. 1869. p. 140 .....	A27.9:7
Cimbex, American adults of, injuring willow and cottonwood in (Webster). 1890. p. 228 .....	A9.7:2
Dairy industry in (Monrad). 1896 .....	A4.3:16
Departures from normal temperature and rainfall, with crop yields in (Dunwoody). 1896 .....	A29.2:N27
Farm resources and products of. 1868. p. 207 .....	A27.9:6
Grasses and forage plants of, notes on (Pammel). 1897 .....	A3.3:9
Grasses of arid districts of, investigation of (Vasey). 1886 .....	A6.3:1
Insect injuries in—	
1884. (Bruner). p. 398 .....	A1.1:884
1887. p. 164 .....	A1.1:887
same. p. 33 .....	A9.3:13
1888. p. 139 .....	A1.1:888
same, p. 139 .....	A9.1:888
1889. p. 95 .....	A9.3:22
1890. p. 9 .....	A9.3:23
1891. p. 9 .....	A9.3:26
1892. p. 34 .....	A9.3:30
1893. p. 9 .....	A9.3:32
Live-stock industry of, condition of (Harwi). p. 382 .....	A4.1:889-90
Maladie du coit among horses in—	
extirpation of (Nørgaard). p. 62 .....	A4.1:893-4
second outbreak of (Faville and Day). p. 134 .....	A4.1:899
supposed (Faville). p. 359 .....	A4.1:891-2
Precipitation (rain and melted snow) at stations in, details of. 1894 .....	A29.2:P91 <sup>1</sup>
Rabies in, alleged, investigation of (Gibbs). p. 188 .....	A4.1:897
Sand hills of, flora of (Rydberg). 1895. p. 133 .....	A6.5:3
Sheep feeding in. p. 604 .....	A4.1:901
Sheep husbandry in (M'Cann). p. 193 .....	A1.1:864
Swine plague in, investigation of. p. 434 .....	A4.1:885
Timber resources of (Hall). 1901. p. 207 .....	A1.10:901
Underflow and sheet waters, irrigable lands, and geological structure of, with its effect upon water supply (Hicks). 1893. pt. 3, p. 167 .....	A15.2:Ir7
Water in, duty of (Stout). 1900. p. 149 .....	A10.3:86
Water laws of (Wilson). 1899. p. 58 .....	A10.3:58
Western—	
benefits of Weather Bureau to (Piercy). 1899. p. 144 .....	A29.3:24
pocket gopher of genus Geomys from, description of (Merriam). 1890. p. 51 .....	A5.5:4
Wheat in. 1867. p. 366 .....	A27.9:5
See also Cass County — Great Eastern Canal — Schuyler.	
Necrophagous diptera, notes on species of (Webster). 1890. p. 356.	A9.7:2
Nectar, what it is, and some of its uses (Trelease). p. 319 .....	A9.2:C82
Nectarophora destructor. See Green-pea louse.	
Needham, Daniel. Agricultural exhibition at Hamburg. p. 19 ....	A1.1:863

# Index

	Classification no.
Neely, Samuel T. Traction tests on public roads. 1896.....	A22.3:20
Negroes:	
Dietary studies among, in eastern Virginia, 1897 (Frissell). p. 7.	A10.3:70
same. 1898 (Bevier). p. 27.....	A10.3:70
Food of, in Alabama in 1895 and 1896, dietary studies with refer- ence to (Atwater and Woods).....	A10.3:38
Nelson, Aven. Red Desert of Wyoming and its forage resources. 1898.....	A3.3:13
Nelson, Edward William:	
Mexican grasses collected by, in Mexico, 1894-95 (Scribner and Smith). 1897. p. 11.....	A3.3:4
Tres Marias Islands, Mexico—	
bibliography of, partial. 1899. p. 93.....	A5.5:14
birds of. 1899. p. 21.....	A5.5:14
description of. 1899. p. 7.....	A5.5:14
mammals of. 1899. p. 15.....	A5.5:14
<i>See also</i> , as collector, Coulter, John M., and Rose, Joseph Nelson.	
Nelson, S. B.:	
Horse industry of the Northwest. 1900. p. 23.....	A1.9:117
Sheep, feeding wild plants to. 1898. p. 10.....	A4.3:22
same, p. 421.....	A4.1:898
Nematinae of North America, a subfamily of leaf-feeding hymenop- tera of family Tenthredinidae, revision of (Marlatt). 1896....	A9.8:3
Nematode leaf disease, note on (Atkinson). 1891. p. 31.....	A9.7:4
Nematoid worm. <i>See</i> <i>Anguillula aceti</i> — <i>Aphelenchus olesistus</i> .	
Neosho, Mo. <i>See</i> Jaeger, Hermann.	
Nephoscope, improved, report on (Marvin). 1896. p. 9.....	A29.6:24
<i>See also</i> Marine nephoscope.	
Nervisequum. <i>See</i> <i>Glæosporium nervisequum</i> .	
Nervous system:	
Diseases of—	
of cattle (Harbaugh). p. 111.....	A4.2:C29 <sup>2</sup>
of horses (Trumbower). p. 181.....	A4.2:H78
Nesbit, D. M.:	
Sweet potatoes.....	A1.9:129
Tide marshes of U. S. 1885.....	A1.7:7
Ness City, Kansas, sorghum-sugar experiments at, 1889 (Wiley) ....	A7.3:26
Same (McElroy). p. 81.....	A7.3:26
Nessler, J. Grape mildew, copper soda and copper gypsum as reme- dies for. 1891. p. 73.....	A28.5:6
Nest box for keeping individual egg record (Langworthy). 1900. p. 19.....	A1.9:114
Netherlands:	
Agricultural statistics of. 1886. p. 406.....	A27.9:24
Agriculture in. 1869. p. 387.....	A27.9:7
same. 1885. (Erkstein.) p. 83.....	A27.9:24
Climate of (Snellen). 1896. p. 627.....	A29.3:11 <sup>2</sup>
History of high farming as illustrated in (Tilden). p. 527.....	A1.1:866
Markets for American products in. 1895.....	A12.3:5
Projected exhibition, note on. 1869. p. 150.....	A27.9:7
Sugar beets in, production of, 1866-82. No. 9. p. 46.....	A27.9:22
<i>See also</i> Amsterdam — Arnheim.	
Nettle:	
Cultivation of, in Germany (Stanton). p. 560.....	A1.1:878
Experiments with (Ladé). p. 562.....	A1.1:878
Question of, and its future. p. 561.....	A1.1:878
Nettleton, Edwin S.:	
Artesian and underflow investigation between ninety-seventh degree of west longitude and foothills of Rocky Mountains. 1891.....	A15.2:P94 <sup>2</sup>
Artesian and underflow investigation, final report of. 1893. Pt. 2.	A15.2:1r7 <sup>2</sup>
Artesian wells investigation, field work in. 1890. p. 31.....	A15.2:Ar7
Reservoir system of Cache la Poudre Valley, report on. 1901....	A10.3:92
Neumann-Spallert, F. X. von:	
Cereal crops of Austro-Hungary, value of. 1883. No. 64. p. 66.	A27.9:21
Grain, commerce in, 1879-81. No. 14. p. 35.....	A27.9:22

	<b>Index</b>
	<b>Classification no.</b>
<b>Nevada:</b>	
Artesian water in (Irish). 1891. p. 199.....	A15.2:P94 <sup>1</sup>
Cattle industry of (McNeely). p. 377.....	A4.1:898
Dry norther in (Abbe). 1895. p. 173.....	A29.6:23
Farm resources and products of. 1868. p. 271.....	A27.9:6
Fishes of Death Valley expedition, 1891, collected in, report on, with descriptions of new species (Gilbert). 1893. p. 229....	A5.5:7
Grasses of arid districts of, investigation of (Tracy). 1888. p. 5.	A6.3:6
Irrigation investigations in (Wilson). 1902. p. 147.....	A10.3:104
Land and fresh-water shells collected in, by Death Valley expe- dition (Stearns). 1893. p. 269.....	A5.5:7
Southeast, almond in (Judd). p. 55.....	A20.1:895
<b>Southern—</b>	
birds observed in, by Death Valley expedition of 1891, notes on (Fisher). 1893. p. 7.....	A5.5:7
cactuses, yuccas, and agave in deserts and desert ranges of, geographic and vertical distribution of (Merriam). 1893. p. 345.....	A5.5:7
trees and shrubs in deserts and desert ranges of, distribution of (Merriam). 1893. p. 285.....	A5.5:7
Stratigraphy and hydrology of (Hicks). 1890. p. 71.....	A15.2:Ar7
<i>See also</i> Carson City — Humboldt County — Nye County — Win- nemucca.	
<b>New Brunswick:</b>	
Earthquakes in, notes on (Abbe). 1898. p. 266.....	A29.6:26
Thunderstorms in, 1897 (Kain). p. 105.....	A29.6:26
Tidal lands and diked marshes of (Boardman). 1885. p. 33....	A1.7:7
Whirlwinds in, notes on local (Kain). 1900. p. 488.....	A28.6:28
<b>New England:</b>	
Associated dairying in (Myrick). p. 375.....	A4.1:887-8
Conifers of, some diseases of (Schrenk). 1900.....	A28.3:25
<b>Farming in—</b>	
does it pay? p. 187.....	A1.1:874
report on. p. 255.....	A1.1:870
Land birds of, oology of some, as a means of identifying injurious or beneficial species (Samuels). p. 386.....	A1.1:864
Mammalogy and ornithology of, with reference to agricultural economy (Samuels). p. 265.....	A1.1:863
Northern, evergreen and other forest trees in, destruction of, causes of (Packard)—	
[1st] report. 1883. p. 138.....	A1.1:883
same, p. 138.....	A9.1:883
2d report, p. 374.....	A1.1:884
3d report, p. 319.....	A1.1:885
same, additions. p. 17.....	A9.3:12
4th report. 1886. p. 20.....	A9.3:13
5th report. 1887.....	A8.1:4
Quarantine of cattle, sheep, and other ruminants, and swine. 1902.....	A4.5:99
Snow in, report on, 1817-40 (Larned). p. 75.....	A29.6:22
Southern, and other localities, relative humidity of (Henry). 1896.....	A29.3:19
Sugar beet, culture of (McMurtrie). 1879. p. 181.....	A1.6:28
Thunderstorms in, investigation of (Ward). 1893. p. 30.....	A29.3:9
<b>New England Meteorological Society, 36th regular meeting of, notes on (Abbe). 1896. p. 13.....</b>	<b>A29.6:24</b>
<b>New Hampshire:</b>	
Farm of J. B. Walker, at Concord. 1870. p. 76.....	A27.9:8
Farm resources and products of. 1868. p. 5.....	A27.9:6
Forest condition and lumber and wood trade of (Hough). 1884. p. 348.....	A13.5:4
Pig-feeding experiments in (Burkett). p. 465.....	A4.1:899
Road improvement in, extract from governor's message (Rollins). p. 5.....	A22.4:33
Wheat growing in (Bartlett). p. 96.....	A1.1:862
<i>See also</i> Hampton Beach — Washington, Mount.	
<b>New Haven, Conn., winds and rainfall of, 1873-1900 (Davis). p. 261.</b>	<b>A29.6:30</b>

# Index

	Classification no.
<b>New Jersey:</b>	
Abutilon avicennæ in, cultivation of (Waterhouse). p. 606 .....	A1.1:879
Agricultural education in (Cook). 1882. p. 7 .....	A1.8:22
Army worm in, account of invasion of—	
1880 (Lockwood). p. 139 .....	A8.1:3
1881 and 1882. p. 101 .....	A1.1:881-2
same, p. 101 .....	A9.1:882
Cattle in, anthrax among (Hunt). p. 359 .....	A1.1:881-2
Contagious pleuro-pneumonia in (Hunt). p. 297 .....	A4.1:884
Cranberry culture in (Taylor). p. 569 .....	A1.1:877
Economic peronosporæ for 1889 in, some notes upon (Halsted).	
1889. p. 201 .....	A28.5:5
Farm resources and products of. 1868. p. 15 .....	A27.9:6
Farmers' institute work accomplished in (Voorhees). 1902. p. 37 .....	A10.3:120
Food and nutrition investigations in, 1895 and 1896 (Voorhees) ..	A10.3:35
Horse breeding in (Romaine). p. 385 .....	A4.1:889-90
Insects in, notes on (Smith)—	
1891. p. 43 .....	A9.7:4
1892. p. 93 .....	A9.7:5
1893. p. 187 .....	A9.7:6
1894. p. 185 .....	A9.7:7
Irrigation in, notes on (Phelps and Voorhees). 1897 .....	A10.3:36
Irrigation in, report on (Voorhees)—	
1900 .....	A10.3:87
1902. p. 353 .....	A10.3:119
Pleuro-pneumonia among cattle in, investigation (Miller). p. 45 ..	A1.1:881-2
same (Corlies). p. 46 .....	A1.1:881-2
Reclamation of lands in, reports of State Geologist of New Jersey,	
1869 and 1870. p. 221 .....	A1.7:7
San Jose or pernicious scale in, distribution of (Smith). 1898.	
p. 32 .....	A9.6:17
San Jose scale in (Smith). 1894. p. 163 .....	A9.7:7
Southern, agriculture in. 1868. p. 140 .....	A27.9:6
Southwestern, tide lands in, reclamation of. 1870. p. 230 .....	A27.9:8
State aid to road building in (Burrough). 1894 .....	A22.3:9
same (Owens). 1901. p. 22 .....	A22.3:21
Steam plowing in. 1869. p. 224 .....	A27.9:7
Stone roads in (Harrison). 1895. p. 23 .....	A22.3:17
West, market products of (Lippincott). p. 249 .....	A1.1:865
<i>See also</i> Atlantic City—Bergen Point—Cherry Hill—Hudson County—Long Branch—Oakland—Rio Grande—Salem— Trenton—Vineland.	
<b>New Mexico:</b>	
Agricultural features of (Furnas). 1892. p. 173 .....	A1.8:20
Agriculture of, notes on (Thomas). 1869. p. 379 * .....	A27.9:7
Anthrax in, outbreak of (McLean). 1881. p. 317 .....	A1.6:34
Artesian basins in, geological conditions of (Van Diest). 1890.	
p. 87 .....	A15.2:Ar7
Artesian well investigations, field work (Carpenter). 1890. p.	
233 .....	A15.2:Ar7
Chilo saccharalis in (Townsend). 1891. p. 24 .....	A9.7:4
Climatic and agricultural features of, note on (Hilgard and others).	
1882 .....	A1.8:20
Dietary studies in, 1895 (Goss) .....	A10.3:40
Eastern, artesian and underground waters in, west of 97th merid-	
ian (Hill). 1893. pt. 3, p. 41 .....	A15.2:Ir7 <sup>2</sup>
Entomological notes from (Cockerell). 1902. p. 107 .....	A9.6:37
Farm resources and products of. 1868. p. 279 .....	A27.9:6
Forage plants of, notes on (Pool). 1888. p. 48 .....	A6.3:6
Forest conditions of Rocky Mountains in (Ensign). p. 41 .....	A13.3:2
Fruits of, tropical and semitropical (Klee). 1891. p. 111 .....	A20.3:1
Grasses of arid districts of, investigation of (Tracy). 1888. p. 5 ..	A6.3:6
Grasses of desert region of, plates and descriptions of (Vasey).	
1890 .....	A6.2:N82 <sup>1</sup>
same .....	A6.3:12

\* By a misprint, this page number appears twice.



**New Mexico—Continued**

Insect injury in, possible and actual influence of irrigation on (Townsend). 1892. p. 78.....	A9.7:5
Insects—	
biologic notes on (Townsend). 1892. p. 37.....	A9.7:5
injurious of, notes on (Cockerell). 1894. p. 207.....	A9.7:7
Irrigation in, 1901. p. 37.....	A10.3:119
Locusts, injurious and other, of (Townsend). 1893. p. 29.....	A9.7:6
Northwestern, diurnal winds on faint radiant in (Dodge). 1901. p. 299.....	A29.6:29
Nutrition investigations in, 1897 (Goss).....	A10.3:54
Plants in, certain, of economic value as food for man and stock (Richardson). p. 282.....	A1.1:887
Statistics of. 1876. p. 477.....	A27.9:14
Water supply of, for season of 1900 as depending on snowfall (Hardinge). p. 496.....	A29.6:28
Wine in. 1866. p. 424.....	A27.9:4
<i>See also</i> Pecos River—Pecos Valley.	
<b>New Orleans, La.:</b>	
Ramie machine trials at. 1892. p. 347.....	A27.9:30
Weather forecast district, report of, monthly, Sept., 1901–Oct., 1902 (Cline).....	A29.6
<b>New Orleans, La., World's Industrial and Cotton Centennial Exposition, 1884–5:</b>	
Agriculture Department, exhibit of manufactures from native woods, catalogue of (Dodge). 1886.....	A1.7:10
Catalogue of exhibit of economic entomology at. 1888.....	A9.2:N42
Exhibits illustrating agricultural statistics (Dodge). 1885.....	A1.8:40
Grass collections at, descriptive catalogue of (Vasey).....	A6.2:G76
New Richmond, Wis., tornado at (Libby). 1899. p. 299.....	A29.6:27
<b>New South Wales:</b>	
Cattle tick and tuberculosis in (Baker). p. 386.....	A4.1:898
same, correction, p. 502.....	A4.1:899
Corn in, production of. 1893. p. 311.....	A27.9:31
Irrigation in, recent investigation, legislation, and administration (Hinton). 1891. p. 235.....	A15.2:P94 <sup>1</sup>
Sheep breeding in. 1875. p. 526.....	A27.9:13
Sugar-cane insects in (Koebele). 1892. p. 385.....	A9.7:4
<b>New York Agricultural Society, Albany, Feb., 1871, annual meeting of. p. 66.....</b>	
<b>New York City:</b>	
Animals in, contagious diseases of, preliminary report of veterinary inspectors in investigation of (McLean and others). 1884. p. 19.....	A1.7:6
Cattle market, 1858–63. No. 1, p. 33.....	A27.9:2
Dietary studies in—	
1895 and 1896 (Atwater and Woods).....	A10.3:46
1896 and 1897 (Atwater and Bryant). 1902.....	A10.3:116
Entomological work in Central Park, 1891 (Southwick). p. 59..	A9.7:4
Exports and imports of, 1863. No. 5, p. 10; No. 6, p. 19.....	A27.9:1
same, 1864. No. 1, p. 30; No. 2, p. 27; No. 3, p. 6; No. 4, p. 8; No. 5, p. 33; No. 6, p. 32.....	A27.9:2
same, 1862–64. No. 1, p. 31; No. 2, p. 32.....	A27.9:3
Harbor of, fog in, Dec., 1895 (Abbe). p. 463.....	A29.6:23
same. 1901 (Abbe). p. 175.....	A29.6:29
Hay market, 1867–70. p. 23.....	A27.9:9
Immigration at, Jan.–June, 1864. No. 4, p. 8.....	A27.9:2
same, July–Sept., 1864. No. 5, p. 37.....	A27.9:2
Live stock receipts at, 1867–68. p. 21.....	A27.9:7
same, 1869. p. 44.....	A27.9:8
Market gardening in vicinity of (Henderson). p. 243.....	A1.1:865
Parks of, economic entomological work in (Southwick). 1894. p. 135.....	A9.7:7
Poultry in, sale of. 1869. p. 302*.....	A27.9:7
Precipitation at, 1870–91 (Draper). p. 79.....	A29.6:20
Prices in, 1855–66. p. 207.....	A27.9:4

\*By a misprint, this page number appears twice.

# Index\*

	Classification no.
New York City—Continued	
Public schools of, cooking instructions in, history and present status of (Hogan). 1899 .....	A10.3:56
Thermometer readings at, comparative (Henry). 1900. p. 99 ..	A29.6:28
Tides at, distant storms indicated by (Jones). 1894. p. 372 ....	A29.6:22
Trade of, 1866-68. p. 19 .....	A27.9:7
Weather Bureau office in, removal of (Henry). 1898. p. 455...	A29.6:26
Wood-leopard moth in parks of (Southwick). 1894. p. 138.....	A9.7:7
New York City, [2d] international conference on plant breeding and hybridization, 1902, report on. 1902. p. 208.....	A10.6:14
New York Dairymen's Association, 14th meeting, Dec. 9-11, 1890 (Walton). p. 625 .....	A27.9:28
New York State:	
Anthrax among cattle in (Law). 1881. p. 312.....	A1.6:34
Boards of supervisors of, third annual good-road convention, Albany, 1902 .....	A22.3:22
Broom-corn culture in. 1867. p. 286.....	A27.9:5
Cattle feeding in (Stewart). p. 299 .....	A1.1:876
Cheese industry of (Gilbert). 1896 .....	A4.3:15
Entomologic service in, voluntary (Felt). 1899. p. 39.....	A9.6:20
Farm resources and products of. 1868. p. 10 .....	A27.9:6
Forest and shade tree insects in, observations on (Felt). 1901. p. 63 .....	A9.6:31
Hessian fly in, in 1901 (Felt). 1902. p. 22 .....	A9.6:31
Highway legislation in, history of (Wright). 1901. p. 29 .....	A22.3:21
Insects of, notes on—	
1896 (Lintner). p. 54 .....	A9.6:6
1898 (Felt). p. 16 .....	A9.6:17
1899 (Felt). p. 60 .....	A9.6:20
1902 (Felt). p. 102 .....	A9.6:37
Lightning in, destruction by, Aug., 1898 (Allen). p. 357.....	A29.6:26
Lumber industry, history of (Fox). 1902 .....	A13.3:34
Northern, evergreen forests in, causes of destruction of (Packard)—	
[1st] report, p. 138.....	A1.1:883
same, p. 138 .....	A9.1:883
2d report, p. 374 .....	A1.1:884
Pleuro-pneumonia among cattle in, investigation of (Hopkins). p. 43 .....	A1.1:881-2
Road improvement in—	
address on (Stone). 1897 .....	A22.4:28
extract from governor's message (Roosevelt). p. 6 .....	A22.4:33
Roads—	
construction of, by local assessment, act for. 1894 .....	A22.4:15
good, State aid to (Bond). 1901. p. 20.....	A22.3:21
San Jose scale in, experimental work against (Felt). 1902. p. 35.	A9.6:37
Snow country of central, note on (Kimball). 1902. p. 135.....	A29.6:30
Thunderstorms of May 3, 1892, in (Turner). 1892. p. 139.....	A29.6:20
Tuberculosis among cattle in, prevalence of (Schroeder). 1896. p. 66 .....	A4.1:893-4
Western—	
grape in, diseases of (Fairchild). 1891. p. 95.....	A28.5:6
leaf diseases of nursery stock in, experiments in preventing (Fairchild). 1891. p. 240.....	A28.5:7
new or rare fungi from, notes on (Fairman). 1889. p. 78 ...	A28.5:5
See also Albany—Buffalo—Franklinville—Ithaca—Poughkeepsie—Richmond County—Syracuse—Utica—Westfield—Willets Point—Woodhaven.	
New York State Agricultural Experiment Station, Geneva, N. Y.:	
Biological and dairy building of, report on. 1899. p. 401 .....	A10.6:10
Methods of keeping records of horticultural work at (Beach). 1898. p. 72 .....	A10.3:49
New York State Cheese Manufacturers' Association, 2d annual report of. 1865. No. 5, p. 6 .....	A27.9:3
New York State forest preserve. See Hosmer, Ralph S., and Bruce, Eugene S.	
New Zealand:	
Icerya purchasi and Vedalia cardinalis in (Wright). 1893. p. 194.	A9.7:6

**Index**  
Classification no.

<b>New Zealand—Continued</b>	
Insects in. parasitic and predaceous, studies of (Koebele). 1893..	A1.8:51
Root fungus of (Wight). 1889. p. 199 .....	A28.5:5
Sheep in, blood poisoning in (Gilruth). p. 233.....	A4.1:901
Sheep scab, how stamped out in. p. 505 .....	A4.1:900
<i>See also Australasia — Canterbury.</i>	
New Zealand flax, results of recent investigations relating to (Dodge). 1893. p. 62 .....	A11.5:5
New Zealand katipo, report on (Wight). 1889. p. 134 .....	A9.7:2
Newberne, N. C., soil survey from Raleigh to (Smith). p. 187 .....	A26.5:900 <sup>1</sup>
Newcomb, Harry T. Railway and other transportation services, changes in rates of charge.....	A27.8:15
Newcomb, Simon. Meteorological subjects, explanations of. 1902. p. 127 .....	A29.6:30
Newcombe, F. C. Perennial mycelium of fungus of blackberry rust. 1891. p. 106.....	A28.5:6
<b>Newell, Frederick Haynes:</b>	
Irrigation on Great Plains. 1896. p. 167.....	A1.10:896
Lumbering, conservation, and water-supply. 1901. p. 3.....	A13.3:30
Rainfall and charts of rainfall. 1902. pp. 225, 226.....	A29.6:30
<b>Newell, Wilmon. <i>See, as joint author, Webster, Francis M.</i></b>	
Newspaper and the weather forecaster (Watts). 1901 .....	A29.2:F76
Same (Watts). 1902. p. 43.....	A29.3:31
Newspaper crop reports. 1874. p. 427.....	A27.9:12
Newspaper fakes, notes on (Abbe). 1899. p. 155 .....	A29.6:27
<b>Newton, Isaac:</b>	
Cotton and wool, American, future of. 1864. No. 1. p. 12.....	A27.9:2
Dyer's madder, culture of. 1866. p. 94.....	A27.9:4
Tobacco leaf, tax on, proposed. 1864. No. 1. p. 17 .....	A27.9:2
<i>See also, for reports as Commissioner of Agriculture, 1862-1866...</i>	A1.1:
• Newton, Isaac, short biography of. 1867. p. 189 .....	A27.9:5
Newton, Isaac, and his kites (Abbe). 1896. p. 458.....	A29.6:24
Niagara River, ice jam in, note on (Abbe). 1899. p. 61 .....	A29.6:27
<b>Nicaragua:</b>	
Central and western, rainfall in (Flint). 1899. p. 587.....	A29.6:27
Cyclone in, report on (Clancy). 1897. p. 356.....	A29.6:25
Hydrography of, notes on (Abbe). 1900. p. 345.....	A29.6:28
Rainfall and temperature in (Davis). 1898. p. 211 .....	A29.6:27
Rainfall in, record of 1850-51 (Childs). p. 409.....	A29.6:26
same, 1876-93 (Henry). p. 305 .....	A29.6:26
<i>See also Granada — Masaya — Rivas.</i>	
Nichols, George. Phreatic waters in Nye County, Nev. 1891. p. 207..	A15.2:P94 <sup>1</sup>
<b>Nicholson, H. H. <i>See, as collaborator, Wiley, Harvey Washington.</i></b>	
Nicol, T. W. Orange sorghum cane, cultivation and manipulation of, communication relative to. 1882. p. 122.....	A1.8:22
Nicolai, H. E. Agricultural work at Dyca, Alaska, during season of 1901. p. 312 .....	A10.1 <sup>2</sup> :901
<b>Nicotin. <i>See Tobacco powders and extracts.</i></b>	
Nielsen, H. P. Kenai experiment station, Alaska, report of super- intendent. 1901. p. 254.....	A10.1 <sup>2</sup> :901
Night forecasts, Weather Bureau, is it advisable to distribute by rural free delivery? (Blystone). 1902. p. 191 .....	A29.3:31
Niin of Yucatan, nature and uses. p. 268.....	A1.1:868
Nile floods and Indian monsoons, notes on (Abbe). 1900. pp. 252, 324..	A29.6:28
Nile River (Willcocks). 1894. p. 121 .....	A29.3:11 <sup>1</sup>
Nile Valley, berseem, forage and soiling crop of (Fairchild). 1902..	A19.3:23
Niles, W. B. Hog cholera in Iowa. p. 500 .....	A4.1:898
Nimes, France, popular credit congress, 1895, notice on. p. 26 .....	A27.9:33
Nimmo, Joseph W., jr. Irrigation in Montana, Idaho, eastern Wash- ington, and Oregon, in 1890. p. 149 .....	A15.2:P94 <sup>1</sup>
<b>Nineteenth century <i>See Century, new.</i></b>	
Nitragin, a germ fertilizer for leguminous plants. 1897. p. 19.....	A1.9:65
<b>Nitrates:</b>	
Gunning-Kjeldahl method and a modification applicable in pres- ence of (Voorhees). 1892. p. 85.....	A7.3:35
Nitrogen in, Kjeldahl method applicable to determination of (Scovell). 1887. p. 51 .....	A7.3:16

# Index

Classification no.

## Nitric acid:

- Determination in soils, by Schloessing's method, at Rothamsted Laboratory (Warrington). 1886. p. 47..... A7.3:11
- Effects of presence of few drops of, in acid digestion of soils (Thompson). 1895. p. 49..... A7.3:47
- Method for phosphoric acid determination (Richards). 1886. p. 24 ..... A7.3:12

## Nitric nitrogen:

- Complete fertilizers, Ulsch method in determining (Street). 1892. p. 88 ..... A7.3:35
- Determination of—
- by zinc-iron method (Shiver). 1894. p. 142 ..... A7.3:43
- report on (Sherman). 1895. p. 112 ..... A7.3:47

## Nitrification:

- Arable soil (Deherain). 1896. pp. 353, 491..... A10.6:6
- Element of soil productiveness (Withers). 1902. p. 87..... A10.3:115
- Rate of, of certain fertilizers (Withers and Fraps). 1901. p. 25 . A7.3:62
- See also* Soils.

## Nitrogen:

- Availability of, in mixed fertilizers (Terne). 1893. p. 40..... A7.3:38
- Determination by Kjeldahl method of—
- distilling with and without potassium sulphid (Sweetser). 1896. p. 25 ..... A7.3:49
- effect of presence of metals precipitable by potassium sulphide (Snyder). 1891. p. 39 ..... A7.3:31
- report on (Scovell). 1887. p. 51..... A7.3:16
- same (Spencer). 1886. p. 36 ..... A7.3:12

## Determination of—

- in fertilizers, report of committee on (French Association of Sugar Chemists). 1887. p. 54 ..... A7.3:16
- in soils of some of the experimental fields at Rothamsted, and bearing of results on question of source of nitrogen of our crops (Lawes and Gilbert). 1882. p. 142..... A1.8:31
- report of committee for, at Association of Official Agricultural Chemists—
- 1885. p. 43 ..... A7.3:7
- 1886. p. 34 ..... A7.3:12
- 1887. p. 45 ..... A7.3:16
- 1888. p. 43 ..... A7.3:19
- 1889. p. 85 ..... A7.3:24
- 1890. p. 11 ..... A7.3:28
- 1891. p. 117 ..... A7.3:31
- 1892. p. 67 ..... A7.3:35
- 1893. p. 31 ..... A7.3:38
- 1894. p. 136 ..... A7.3:43
- 1895. p. 106 ..... A7.3:47
- 1896. p. 12 ..... A7.3:49
- 1897. p. 15 ..... A7.3:51
- 1898. p. 14 ..... A7.3:56
- 1899. p. 49 ..... A7.3:57
- 1900. p. 16 ..... A7.3:62
- 1901. p. 77 ..... A7.3:67

- Free atmospheric, contribution to investigation of assimilation of, by white and black mustard (Lotsy). 1894..... A10.3:18

- Hoar frost especially rich in (Abbe). 1896. p. 371..... A29.6:24

## Metabolism of—

- and digestibility of food, experiments on effect of muscular work upon, conducted at University of Tennessee, 1897–1899 (Wait). 1901 ..... A10.3:89
- effect of muscular work upon, experiments on, conducted at University of Tennessee, 1899–1900 (Wait). 1902..... A10.3:117
- in human organism, experiments on (Sherman). 1902 ..... A10.3:121
- in human organism, with respiration calorimeter of special construction, report of preliminary investigations on (Atwater and others). 1897..... A10.3:44
- Metabolized, excretion of, by animals (Langworthy). 1897. p. 817 ..... A10.6:7

Nitrogen—Continued	
Organic, in mixed fertilizers, availability of (Hayes). 1895. p. 112 .....	A7.3:47
<i>See also</i> Albuminoid nitrogen—Nitric nitrogen—Phosphoric acid.	
Nitrogen assimilation in its application to practical agriculture. 1897. p. 906 .....	A10.6:7
Nitrogen-free extract of plants and feeding stuffs (Tollens). 1897. p. 641 .....	A10.6:8
Nitrogen hungriness in soils, recognition of (Hilgard). 1895. p. 58.	A7.3:47
Nitrogen of proteids and that of simpler amids or amido-acids, in- vestigation of analytical methods for distinguishing between (Mallet). 1898 .....	A7.3:54
Nitrogenous compounds of animal and vegetable substances, sugges- tions regarding nomenclature of (Atwater). 1899. p. 118....	A10.3:65
Noctuidæ, from Death Valley, descriptions of (Smith). 1893. p. 328 .....	A9.7:5
Nodular tæniasis in fowls (Moore). 1895.....	A4.4:3
Nome, Cape, Alaska:	
Meteorological report from, Sept., 1900, note on (Abbe). p. 397.	A29.6:28
Temperatures, note on (Abbe). 1900. p. 212.....	A29.6:28
Nonpyogenic streptococcus. <i>See</i> Nørgaard, Victor Andreas, and Mohler, John R.	
Norfolk, Va., tornado and waterspout at, on Aug. 6, 1901 (Gray). p. 372 .....	A29.6:29
Nørgaard, Victor Andreas:	
Anthrax, prevalence of, among domesticated animals. p. 40 ....	A4.1:89-43
Baden-Baden, Germany, Seventh International Veterinary Con- gress, Aug. 7-12, 1899. p. 534 .....	A4.1:899
Blackleg in United States and distribution of vaccine by Bureau of Animal Industry. p. 27.....	A4.1:898
same, abstract; "Blackleg, its nature, cause, and prevention." 1900 .....	A4.4:31
Blackleg; its nature, cause, and prevention .....	A4.4:23
Blackleg vaccine—	
directions for use of. 1897 .....	A4.4:21
same. 1900 .....	A4.4:23 <sup>s</sup>
free distribution of. p. 35.....	A4.1:900
Cattle, lumpy jaw or actinomycosis in, treatment with iodide of potassium. p. 135 .....	A4.1:891-2
same. 1893. p. 39 .....	A4.3:2
Cattle dipping, experimental and practical. 1898. p. 453.....	A1.10:898
Dipping cattle for destruction of ticks. p. 109 .....	A4.1:895-6
Vaccination, preventive against blackleg. 1897.....	A4.4:20
same. 1897. p. 7 .....	A4.4:21
Nørgaard, Victor Andreas, and Mohler, John R.:	
Apoplectiform septicemia in chickens, preliminary report on highly fatal disease caused by a nonpyogenic streptococcus. 1902 .....	A4.3:36
Ovine caseous lymph-adenitis, nature, cause, and economic im- portance of. p. 638.....	A4.1:899
Normandy, prize farm in. 1876. p. 117.....	A27.9:14
North, Edward P. Macadam roads and electric street railways, re- lation between. 1902. p. 59.....	A22.3:22
North America:	
Animals and plants in, geographic distribution of (Merriam). p. 203.....	A1.10:894
Cereals in, geographic distribution of (Plumb). 1898.....	A5.3:11
Desert flora between 32° and 42° north latitude (Parry). 1871. p. 23.....	A27.9:9
English sparrow in, especially in its relation to agriculture (Bar- rows). 1889 .....	A5.3:1
Fungi from—	
new and rare species of (Ellis and Everhart). 1889. p. 145 .	A28.5:5
observations on new species of (Lagerheim). 1891. p. 44...	A28.5:7
Indians of, food products of. p. 404 .....	A1.1:870
Injurious insects in, recent laws against, with laws relative to foul brood (Howard). 1898 .....	A9.6:13

# Index

Classification no.

## North America—Continued

Locusts in—	
destructive, with notes on occurrences in 1891. p. 18 .....	A9.7:4
extracts from early literature on (Berthoud). 1883. App., p. 59.....	A8.1:3
Magnetic survey of (Schott). 1895. p. 460.....	A29.3:11 <sup>1</sup>
Maples of (Vasey). 1875. p. 313.....	A27.9:13
Mycological literature of, index to (Fairchild). 1891. pp. 42, 80, 128, 184 .....	A28.5:6
same (Fairchild). 1891. p. 52 .....	A28.5:7
Oaks of (Vasey). 1872. p. 313.....	A27.9:10
Weasels of, synopsis of (Merriam). 1896.....	A5.5:11
North American.	
[Titles beginning with the words "North American" are entered under the distinctive words of such titles.]	
North American fauna, nos. 1-19 .....	A5.5:
Same, circulars for acknowledgment of.....	A5.4:
North Atlantic:	
Currents and surface temperatures (Hautreux). 1894. p. 192...	A29.3:11 <sup>1</sup>
Hurricane tracks in, recurving of (Abbe). 1899. p. 468.....	A29.6:27
Storms, monthly reports on.....	A29.6:
North Carolina:	
Agricultural education in (Holmes). 1883. p. 84 .....	A1.7:2
Agriculture and climate of (Goodloe). 1867. p. 150.....	A27.9:5
Cattle quarantine of counties in—	
Dec. 16, 1897. p. 9.....	A4.5:8-14
Dec. 20, 1898. p. 5 .....	A4.5:25-29
Dec. 19, 1899. p. 9.....	A4.5:49-55
Dec. 14, 1890. p. 9.....	A4.5:80-87
Jan. 11, 1902. p. 12.....	A4.5:93
Dec. 27, 1902. p. 12.....	A4.5:101
Chestnut trees in, decay of. 1867. p. 58 .....	A27.9:5
Climate and crops in, 1889-98. (Herrmann). p. 544.....	A29.6:26
Farm resources and products of. 1868. p. 73 .....	A27.9:6
Farmers' institute work accomplished in (Patterson). 1902. p. 40.	A10.3:120
Forecasting for rivers of small drainage area, especially those of (Herrmann). 1902. p. 158.....	A29.3:31
Hog-fever in, investigation of (Salmon). p. 432 .....	A1.1:878
Horses in, disease known as "staggers" among (Harbaugh). p. 209.	A4.1:886
Irrigation of rice in (Keeney). 1902. p. 59.....	A10.3:113
Mountain meteorological stations in, note on (Abbe). 1897. p. 445.	A29.6:25
Opium from (McMurtrie). 1873. p. 499 .....	A27.9:11
Road improvement in—	
address on (Stone). 1897 .....	A22.4:28
extract from governor's message (Russell). p. 6.....	A22.4:33
use of convicts in (Holmes). 1895. p. 5 .....	A22.3:16
Roads in, public, improvement of (Holmes). 1894. p. 513.....	A1.10:894
Seismic noises in (Hawkins). 1897. p. 393.....	A29.6:25
Sheep husbandry in (Young). 1878. p. 115.....	A1.2:Sh3
Swine-plague in (Salmon). 1879. p. 123 .....	A1.6:12
Thermal belt in. 1883. No. 58. p. 30 .....	A27.9:21
See also Alamance County — Cary — Newbern — Raleigh — Salisbury — Statesville — Winston-Salem.	
North Carolina strand vegetation. See Ocracoke Island.	
North Dakota:	
Artesian well investigation, field work (Culver). 1890. p. 55 ..	A15.2:Ar7
same (Underhill). 1890. p. 105 .....	A15.2:Ar7
Dairy industry in (Monrad). 1896 .....	A4.3:16
Grasshoppers in (Waldron). 1892. p. 13 .....	A9.3:27
Russian thistle and other troublesome weeds in wheat region of ..	A1.9:10
Snowfall in, 1895 (Abbe). p. 463 .....	A29.6:23
See also Turtle Mountains.	
North Dakota Agricultural College, club of women students at, dietary study of (Ladd). 1901. p. 21 .....	A10.3:91
North Pacific coast weather map, explanation of (Moore) .....	A29.2:N81
Northeast, insect enemies of spruce in (Hopkins). 1901 .....	A9.6:28
Northern farming. See Farming.	



Northern stock ranges, some poisonous plants of (Chesnut). 1900. p. 305.....	A1.10:900
Northern sugar-cane. <i>See</i> Sorghum.	
Northern sugar industry, record of its progress during season of 1883 (Wiley). 1884.....	A7.3:3
Northern United States, fruit regions of, and their local climates (Lippincott). p. 137 .....	A1.1:866
Northern:	
Caribbean Sea and Gulf of Mexico, notes on (Abbe). 1898. p. 568 .....	A29.6:26
Cold waves and heavy snows, possibility of giving warnings of, to stock-raising interests 48 hours in advance (Branden- burg). 1899. p. 33 .....	A29.3:24
same (Glass). 1899. p. 35 .....	A29.3:24
Dry—	
in Nevada (Abbe). 1895. p. 173 .....	A29.6:23
of California (Abbe). 1895. p. 212 .....	A29.6:23
September, on Mexican coast (Baturoni). 1892. p. 252.....	A29.6:20
Tampico and Vera Cruz, notes on (Abbe). 1893. p. 363 .....	A29.6:21
Vera Cruz (Abbe). 1894. p. 226 .....	A29.6:21
Northfield, Mass., meteorological extremes at (Elmer). p. 251.....	A29.6:26
Northrop, B. G. Arbor Day, observance of, by schools. p. 27.....	A1.8:56
Northwest:	
Anthrax among cattle in the (Detmers). 1881. p. 312 .....	A1.6:34
same (McLean). 1881. p. 311.....	A1.6:34
Beet sugar manufacture in, as compared with European countries (Fredericksen). 1879. p. 275 .....	A1.6:28
Codling moth, investigations in, in 1901 (Simpson). 1902.....	A9.6:35
Drought and fire in. 1871. p. 401 .....	A27.9:9
Flax culture in the, in 1891 (Bosse). 1892. p. 40.....	A11.5:4
Forage crops of, cultivated (Hitchcock). 1902.....	A19.3:31
Hog raising in (French). 1900. p. 16.....	A1.9:117
Horse industry of (Nelson). 1900. p. 23.....	A1.9:117
Insect enemies of forests in, preliminary report on (Hopkins). 1899. p. 21 .....	A9.6:21
Live-stock industry of (Standart). p. 326.....	A4.1:885
Marten, new ( <i>Mustela caurina</i> ) from (Merriam). 1890. p. 27 ..	A5.5:4
Plants from, two new species of (Henderson). 1899. p. 201.....	A6.5:5
Rocky Mountain locusts in 1882, observations on (Bruner). 1883. p. 7 .....	A9.3:2
Seed wheat for, correspondence on. 1868. p. 285.....	A27.9:6
Spring wheat culture in (Andrews). 1882.....	A1.6:40
Wheat growing in. 1868. p. 323.....	A27.9:6
<i>See also</i> Pacific Northwest — and names of States.	
Northwesters of Canterbury, New Zealand (Abbe). 1895. p. 383..	A29.6:23
Norway:	
Agriculture in, statistics of. 1873. p. 259.....	A27.9:11
Climate of (Mohn). p. 647.....	A29.3:11 <sup>3</sup>
Insects of, notes on (Schøyen). 1897. p. 79 .....	A9.6:9
Markets for American products in.....	A12.3:7
Thelemark cattle of. 1876. p. 432 .....	A27.9:14
Nostrums for increasing yield of butter (Wiley). 1893.....	A1.9:12
Notiosrex. <i>See</i> Shrews.	
Nova Scotia, tidal lands and diked marshes of (Boardman). 1885. p. 33.....	A1.7:7
November, weather conditions for, monthly statement of average (Garriott). 1900. p. 483.....	A29.6:28
Novius cardinalis, introduction of, from America into Portugal, ac- count of (Le Cocq). 1898. p. 32.....	A9.6:18
same (Howard). 1898. p. 30.....	A9.6:18
Noxious animals. <i>See</i> Animals, noxious.	
Noxious weeds (Coville):	
1889. p. 382 .....	A1.1:889
same, p. 382 .....	A6.1:889
1890. p. 388 .....	A1.1:890
same, p. 388 .....	A6.1:890

# Index

	Classification no.
<b>Noyes, G. Harold:</b>	
Aerial observations. 1899. p. 117 .....	A29.3:24
Industries of Porto Rico, value of climate and crop and storm- warning services of Weather Bureau to. 1902. p. 60 .....	A29.3:31
<b>Noyes, La Verne W.</b> Remarks of, at 2d convention of Weather Bu- reau officials, Milwaukee, Wis. 1901. p. 226.....	A29.3:31
<b>Nummularia</b> , North American species of, synopsis of (Ellis and Ever- hart). 1889. p. 19.....	A28.5:5
<b>Nunn, Roscoe.</b> Career Weather Bureau service offers to young men. 1902. p. 78 .....	A29.3:31
<b>Nursery inspection:</b>	
Connecticut (Britton). 1899. p. 131.....	A10.3:65
Experiences in (Johnson). 1901. p. 163.....	A10.3:99
same (Smith). 1901. p. 165.....	A10.3:99
Illinois, report on (Forbes). 1901. p. 172.....	A10.3:99
Laws and rulings, suggestions toward greater uniformity in (Felt). 1901. p. 161 .....	A10.3:99
Report on (Craw). 1900. p. 87 .....	A10.3:76
<b>Nursery stock:</b>	
Growth of, effect of spraying with fungicides on (Galloway). 1894.	A28.3:7
Leaf-blight and powdery mildew in, treatment of (Galloway). 1891 .....	A28.4:10
Leaf-blight of, experiments with fungicides to prevent (Fairchild). 1891. p. 338 .....	A28.5:7
Principal insects liable to be distributed on (Banks). 1902.....	A9.6:34
Western New York, leaf diseases of, experiments in preventing (Fairchild). 1891. p. 240.....	A28.5:7
<b>Nut grass:</b>	
Circular on (Dewey). 1894 .....	A6.4:2
Extermination of (Tillman). p. 388.....	A1.1:889
same, p. 388 .....	A6.1:889
<b>Nutrients:</b>	
Food; food economy, report on.....	A10.4:43
Food, heat equivalent of (Stohmann). 1896. p. 590 .....	A10.6:6
Loss of, in boiling potatoes, carrots, and cabbage (Snyder). 1897. p. 7.....	A10.3:43
Metabolism of, in animal body, and source of muscular energy (Zuntz). 1897. p. 538 .....	A10.6:7
<i>See also</i> Creatin and Creatinin — Potato.	
<b>Nutrition:</b>	
Principles of, and nutritive value of food (Atwater). 1902 .....	A1.9:142
Relation of, to health of plants (Woods). 1901. p. 155.....	A1.10:901
<i>See also</i> Food and nutrition.	
<b>Nutrition investigations:</b>	
Agriculture Department, development of, 1899. (True and Milner). p. 403 .....	A1.10:899
California Agricultural Experiment Station, 1896-1898 (Jaffa). 1900 .....	A10.3:84
Illinois University, North Dakota Agricultural College, and Lake Erie College, Ohio. 1896-1900 .....	A10.3:91
New Mexico, 1897 (Goss).....	A10.3:54
Of Office of Experiment Stations— lists of publications of office on .....	A10.2:F73
scope and results of. 1902. p. 437.....	A10.1 <sup>2</sup> :901
Pittsburg, Pa., 1894-1896 (Bevier) .....	A10.3:52
Tennessee University, 1896 and 1897 (Waite) .....	A10.3:53
<i>See also</i> Dietary studies — Food — Food and nutrition — Metabo- lism investigations.	
<b>Nuts:</b>	
As food (Langworthy). 1900. p. 18 .....	A1.9:122
Culture of— in U. S., embracing native and introduced species (Corsa). 1896.	A20.2:N95
report on (Engle). p. 37 .....	A20.1:894
same, reprinted. 1896 .....	A20.4:1
Production of, in U. S. in 1889, and quantities and values im- ported from 1890 to 1895. p. 551 .....	A1.10:895
Same, 1891-1896. p. 596 .....	A1.10:896

Nuts—Continued	
<i>See also</i> Almonds — Chestnuts — English walnuts — Peanuts — Pecan — Spanish almonds.	
Nutter, Edward H. Water-bearing gravels and formations tributary to underground water supply of Salinas Valley, Monterey County, Cal. 1901. p. 208 .....	A10.3:100
Nutting, Rufus. Farmers' clubs. p. 236 .....	A1.1:867
Nye County, Nevada, phreatic waters in (Nichols). 1891. p. 207 ...	A15.2:P94 <sup>1</sup>
Oak-feeding silk-worm. <i>See</i> Japanese oak-feeding silk-worm.	
Oakland, Cal., Golden Gate fair, cattle exhibited at, order providing for. Sept. 8, 1900 .....	A4.5:73
Oakland, Bergen County, N. J., wood lot at, belonging to E. D. Page, working plan for (Graves). 1898. p. 301 .....	A1.10:898
Oaks, North American (Vasey). 1872. p. 313 .....	A27.9:10
Oats:	
Cost of growing in Illinois. 1873. p. 36 .....	A27.9:11
Crop condition, monthly notes on .....	A27.9:
Crop statistics, annual .....	A27.1:
Disease of, new and destructive, preliminary notes on (Galloway and Southworth). 1891. p. 72 .....	A28.5:6
Probstier. 1866. p. 436 .....	A27.9:4
Rusted, request for specimens of (Dabney). 1894 .....	A28.4:14
Smut in—	
notes on (Galloway). 1889. p. 164 .....	A28.5:5
prevention of (Kellerman and Swingle). 1891. p. 26 .....	A28.5:6
treatment of. 1892 .....	A1.9:5
Straw and stubble of, specimens requested (Rusk). n. d. ....	A28.4:12
Volunteer, note on. 1867. p. 207 .....	A27.9:5
White Polish, experiments with. 1869. p. 55 .....	A27.9:7
<i>See also</i> Cereals, American — Crops, principal.	
Oaxaca, State of, Mexico, Mexican umbelliferae, mostly from, collected by C. G. Pringle and E. W. Nelson, report on (Coulter and Rose). 1895. p. 289 .....	A6.5:3
Oberholzer, G. R. Thermometers, maximum and minimum are too fragile; can not effective protection be devised without impairing sensitiveness? should not aluminum scales be discarded? 1902. p. 217 .....	A29.3:31
Object-lesson roads. <i>See</i> Roads.	
O'Brien, Glenn. Sorghum-sugar, cold clarification. 1892. p. 88 ...	A7.3:37
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Observatory, aero-physical, equipment of (McAdie). 1896. p. 453 ..	A29.6:24
Ocean:	
Currents of—	
drift ice and theory of (Daly). 1900. p. 433 .....	A29.6:28
note on (Page). 1902. p. 397 .....	A29.6:30
strength and direction of, relations between barometric pressure and (Beehler). 1894. p. 177 .....	A29.3:11 <sup>1</sup>
Does lightning ever strike? (Trowbridge). 1902. p. 478 .....	A29.6:30
Storm waves on (Abbe). 1895. p. 341 .....	A29.6:23
Storms, forecasting, and best methods of making such forecasts available to commerce (Allingham). 1894. p. 150 .....	A29.3:11 <sup>1</sup>
Temperatures and meteorology, notes on (Abbe). 1898. p. 310 ..	A29.6:26
Tides in—	
notes on (Abbe). 1900. p. 109 .....	A29.6:28
partial explanation of some (Harris). 1900. p. 103 .....	A29.6:28
principal, partial explanation of some of (Harris). 1900. p. 103 .....	A29.6:28
Ocean transportation:	
Cattle and horses. p. 87 .....	A4.1:900
Products of agriculture, freight charges for, 1895-96 .....	A27.8:12
Oceanic noises, report on (Kain and others). 1898. p. 152 .....	A29.6:26
Same (Abbe). 1898. p. 216 .....	A29.6:26
Ockerson, John A. Mississippi River, flood planes of. 1894. p. 81 ..	A29.3:11 <sup>1</sup>
Ocracoke Island, plant covering of, a study in the ecology of the North Carolina strand vegetation (Kearney). 1900. p. 261 ..	A6.5:5
October, weather conditions for, monthly statement of average (Garriott). 1900. p. 430 .....	A29.6:28

# Index

	Classification no.
Odenbach, F. L. Remarks of, at 2d convention of Weather Bureau officials, Milwaukee, Wis. 1901. p. 229.....	A29.3:31
Odessa, Russia:	
Agricultural exports from. 1869. p. 153.....	A27.9:8
Grain-trade of. 1874. p. 144 .....	A27.9:13
Trade of. 1874. p. 170 .....	A27.9:12
O'Donnell, John J. Tornado of Jan. 12, 1898, at Fort Smith, Ark. p. 18 .....	A29.6:26
Oemler, A. Truck farming, report on. p. 583 .....	A1.1:885
Offal, packing-house, utilization of (Armour). p. 514.....	A4.1:900
Official Agricultural Chemists, Association of. See Chemists.	
Ogden, Miss E. L. Leaf structure of <i>Jouvea</i> and of <i>Eragrostis obtusi-</i> flora. 1897. p. 12 .....	A3.3:8
Ohio:	
Cattle trade and dairy interests of (Perry). p. 335.....	A4.1:885
Central, Aegeriidae of, notes on. 1891. p. 81.....	A9.7:5
Chinch bug in, three years' study of an outbreak of (Webster). 1896. p. 18 .....	A9.6:6
Coccidae of, partial list of (Webster and Burgess). 1902. p. 109.	A9.6:37
Derecho of May 16, 1899, in (Smith). 1900. p. 196.....	A29.6:27
Farm resources and products of. 1868. p. 249 .....	A27.9:6
Farmers' institute work accomplished in (Miller). 1902. p. 41 .....	A10.3:120
Forestry for certain portions of (Furnas). 1884. p. 346 .....	A13.5:4
Frost of June 30, 1899, in, destructive, notes on (Abbe). p. 311.	A29.6:27
Horn fly in, note on (Kellicott). 1891. p. 35.....	A9.7:4
Insects in—	
as reported to Association of Economic Entomologists—	
1893 (Webster). p. 186 .....	A9.7:6
1894 (Webster). p. 202.....	A9.7:7
1895 (Webster). p. 84.....	A9.6:2
1896 (Webster). p. 66.....	A9.6:6
1897 (Webster and Mally). p. 40 .....	A9.6:9
1898 (Webster and Mally). p. 98 .....	A9.6:17
1899 (Webster and Mally). p. 68 .....	A9.6:20
1900 (Webster). p. 84.....	A9.6:26
1901 (Webster and Newell). p. 84 .....	A9.6:31
1902, 1st half (Osborn). p. 115 .....	A9.6:37
notes on, 1886 (Alwood). p. 48 .....	A9.3:13
same, 1891 (Webster). p. 63.....	A9.3:26
Meteorological records in, notes on (Abbe). 1900. p. 343.....	A29.6:28
Northern—	
chinch bug in, interesting outbreak of (Webster). 1899. p. 55 .....	A9.6:20
grapevines in, black-rot and brown-rot of, extent, severity, and treatment of (Scribner). 1889. p. 76 .....	A6.3:11
great drought of 1845 in (Ford). p. 293.....	A29.6:23
Phenology in, note on, 1856-99 (Abbe). p. 156 .....	A29.6:28
Road building in (Dodge). 1895. p. 16 .....	A22.3:17
Road improvement in, extract from governor's message (Bushnell). p. 7.....	A22.4:33
San Jose scale in, use of lime, sulphur, salt, and resin washes for (Burgess). 1902. p. 33 .....	A9.6:37
Thunderstorms in, during summer of 1892 (Strong). p. 51 .....	A29.3:9
Western, climate of, 1868-70. p. 198.....	A27.9:9
See also Cincinnati—Cleveland—Columbus—Lake County—Lake Erie College, Painesville—Madison County—Montgomery County.	
Ohio Agricultural Experiment Station, insectary and office methods used at (Webster). 1899. p. 46 .....	A9.6:20
Ohio River and tributaries in periods of low water, importance of water-stage forecasts of (Smyth). 1902. p. 146 .....	A29.3:31
Oil. See Oleo oil.	
Oil emulsions, simple device for preparation of (Morgan). 1896. p. 93 .....	A9.6:6
Oil of peppermint, account of. 1884. No. 9, p. 28.....	A27.9:22
Oil-producing seeds (Hicks). 1895. p. 185 .....	A1.10:895

	<b>Index</b>
	<b>Classification no.</b>
<b>Oils and fats:</b>	
Edible, not including dairy products, methods for analysis of (Tolman). 1901.....	A7.2:Oi5
same. p. 20.....	A7.3:65
Specific gravity of, at temperature of boiling water, determination of (Ewell). 1901. p. 119.....	A7.3:62
<i>See also</i> Fats.	
<b>Oklahoma:</b>	
Cattle, quarantine line for, order modifying—	
Apr. 26, 1897.....	A4.5:3
Dec. 16, 1897. p. 6.....	A4.5:8-14
Dec. 20, 1898. p. 2.....	A4.5:25-29
Dec. 19, 1899. p. 6.....	A4.5:49-55
Dec. 14, 1900. p. 6.....	A4.5:80-87
Jan. 11, 1902. p. 8.....	A4.5:93
Dec. 27, 1902. p. 8.....	A4.5:101
Frosts in, dates of first killing (Abbe). p. 328.....	A29.6:22
Plants of, native and of adjacent districts, observations on, (Carleton). 1892. p. 220.....	A6.5:1
Silent electrical and dust storm in, Jan., 1895 (Abbe). p. 13....	A29.6:23
• Wind-roses for; notes on (Abbe). 1891-99. p. 21.....	A29.6:28
<i>See also</i> Washita County.	
Olds, Henry Worthington. <i>See</i> , as joint author, Palmer, Theodore Sherman.	
O'Leary, T. S. Barometer at sea. 1894. p. 167.....	A29.3:11 <sup>1</sup>
Oleo oil, statistics of, report on (Pearson). p. 287.....	A4.1:899
Same (Pearson). 1900-1901. p. 398.....	A4.1:901
<b>Oleomargarine:</b>	
Analysis of, method for (Morse and Burton). 1890. p. 99.....	A7.3:24
France (Tourgée). p. 513.....	A4.1:900
Household tests for detection of renovated butter and (Patrick). 1901.....	A1.9:131
Ingredients of (Wilson). p. 513.....	A4.1:900
Legislation relating to. 1886. p. 195.....	A27.9:24
Statistics of (Pearson). p. 287.....	A4.1:899
same, 1900 and 1901 (Pearson). p. 398.....	A4.1:901
Oleomargarine cheese. 1875. p. 459.....	A27.9:13
<b>Olive:</b>	
Cultivation of in United States. p. 367.....	A1.1:877
same (Pierce). 1896. p. 371.....	A1.10:896
Culture and uses of (Smith and Langworthy). 1900. p. 11.....	A1.9:122
Industry (Cooper). 1892. p. 130.....	A1.8:20
Tuberculosis of (Pierce). 1891. p. 148.....	A28.5:6
Oliver, George W. Pecan, budding the. 1902.....	A19.3:30
Olmsted, Frederick E. Forest lands, working plan for, near Pine Bluff, Ark. 1902.....	A13.3:32
Olshausen, B. A. <i>See</i> , as joint author, Jensen, Charles A.	
<b>Omaha, Nebr.:</b>	
Convention of Weather Bureau officials, notes on (Abbe). 1898. pp. 213, 412.....	A29.6:26
Experiment station veterinarians, second annual meeting, 1898, proceedings of. 1898.....	A4.3:22
Trans-Mississippi and International Exposition, work of Animal Industry Bureau at, p. 504.....	A4.1:899
Oncocnemis, new species of (Smith). 1888. p. 18.....	A9.7:1
<b>Onion:</b>	
Blight and smut, microscopic investigations of (Taylor). 1872. p. 449.....	A27.9:10
Culture of (Watts). 1896.....	A1.9:39
General report on. p. 213.....	A1.1:869
History, culture, and preservation of (Slade). p. 235.....	A1.1:865
Methods of growing. 1902. p. 25.....	A1.9:149
<b>Ontario:</b>	
Agricultural statistics of. 1874. p. 462.....	A27.9:13
Crop report, 1883-84. No. 11, p. 39.....	A27.9:22
Crops and stock in: 1890. p. 484.....	A27.9:28
Crops of. 1887. p. 453.....	A27.9:25
Farmers' institute work accomplished in (Creelman). 1902. p. 26.	A10.3:120

# Index

	Classification no.
Ontario—Continued	
Farmers' institutes in (Creelman). 1902. p. 32.....	A10.3:110
Forage plants in, experiments with (Kennedy). 1899.....	A3.4:20
Forestry in, address on (Phipps). p. 43 .....	A1.7:5
Statistics of. 1893. p. 245.....	A27.9:31
"Ontario," merino ram, account of. p. 355 .....	A1.1:866
Ontario, Oreg. Forage conditions between Winnemucca, Nev., and (Griffiths). 1902.....	A19.3:15
Ontario, Lake, currents of, notes on (Abbe). 1894. p. 259.....	A29.6:21
Oology of some land birds of New England, as a means of identifying injurious or beneficial species (Samuels). p. 386.....	A1.1:864
Opium from North Carolina (McMurtrie). 1873. p. 499.....	A27.9:11
Opium poppy:	
Cultivation of, experiments in. p. 206.....	A1.1:870
Culture of, in Smyrna. p. 233.....	A1.1:869
Ophthalmia. <i>See</i> Cattle.	
Optical phenomena:	
Notes on (Abbe)—	
1895. pp. 14, 298.....	A29.6:23
1898. p. 569 .....	A29.6:26
Washington, D. C., Feb. 13, 1895 (Abbe). p. 56.....	A29.6:23
Opuntia, North American species of, preliminary revision of (Coul- ter). 1896. p. 355.....	A6.5:3
Orange:	
Cultivation and consumption of, facts regarding. p. 561 .....	A1.1:877
Culture of (Redden). p. 147.....	A1.1:867
Fertilization of soil as affecting, in health and disease (Webber). 1894. p. 193 .....	A1.10:894
Florida, diseases of (Underwood). 1891. p. 27.....	A28.5:7
Fluted scale of, and its natural enemies in Australia (Koebele). 1890 .....	A9.3:21
Insects affecting, with practical suggestions for their control or extermination (Hubbard). 1885 .....	A9.2:Or1
Insects injurious to, in Brazil, preliminary report of observations upon (Branner). 1884. p. 63.....	A9.3:4
Insects injuriously affecting orange tree, experiments with kero- sene upon .....	A9.3:1
Insects of, miscellaneous notes on (Hubbard). 1883. p. 9.....	A9.3:1
Mite of, six-spotted (Riley). 1890. p. 225 .....	A9.7:2
Propagating other citrus fruits and, methods of (Webber). 1896. p. 471.....	A1.10:896
Root-knot disease of, in Florida, due to work of Anguillula (Neal). 1889 .....	A9.3:20
Rust of—	
microscopic observations of (Taylor). 1873. p. 588 .....	A27.9:11
report of. (Hubbard). p. 361.....	A1.1:884
Scale-insects of—	
experiments upon (Voyle). 1883. p. 19 .....	A9.3:1
same (Neal). 1883. p. 31 .....	A9.3:1
in California, and particularly icerya or fluted scale, alias white scale, alias cottony cushion-scale, etc., (Riley). 1887. p. 9.	A9.3:15
in Florida, effects of cold upon (Voyle). 1884. p. 70.....	A9.3:4
remedies and their application (Hubbard). p. 106 .....	A9.1:882
Sooty mold of, treatment for (Webber). 1895.....	A28.4:15
same (Webber). 1897 .....	A28.3:13
Various stocks for, relative merit of, with notes on mal di goma and mutual influence of stock and scion (King). 1891 .....	A20.3:4
<i>See also</i> Aleyrodes citri—Morelos orange fruit-worm—Osage orange.	
Orange sorghum cane, cultivation and manipulation of, communica- tion relative to (Nicol). 1882. p. 122 .....	A1.8:22
Orchard grass, spot disease of (Trelease). p. 129 .....	A1.1:886
Same. p. 129 .....	A28.1:886
Orchard insecticide work in Illinois, report on (Forbes). 1901. p. 172.....	A10.3:99
Orchard-spraying outfit, cheap, note on. 1895. p. 586.....	A1.10:895
Same. 1896. p. 623.....	A1.10:896
Orchard trees, small, fumigator for. 1901. p. 21.....	A1.9:133



<b>Orchards:</b>	
Cover crops grown to protect trees and improve soil of. 1899. p. 12.....	A1.9:87
Cropping vs. cultivating, and how it should be done. 1899. p. 16.....	A1.9:87
Crops of, insects injurious to (Chittenden). 1899.....	A9.6:19
Deciduous, winter irrigation of. 1901. p. 12.....	A1.9:144
Enemies to, in Pacific Northwest (Piper). 1902.....	A1.9:153
How birds affect (Beal). 1900. p. 291.....	A1.10:900
Injuries to, by red-legged flea-beetle, in Maryland and Virginia (Schwarz). 1893. p. 334.....	A9.7:5
Inspection of (Craw). 1900. p. 87.....	A10.3:76
same (Johnson). 1901. p. 163.....	A10.3:99
Irrigation methods in (McClatchie). 1900. p. 91.....	A10.3:76
Pear leaf-blight in, treatment of (Waite). 1891. p. 333.....	A28.5:7
Scale insects of (Howard). 1894. p. 249.....	A1.10:894
Shelter and protection. p. 147.....	A1.1:862
<b>Oregon:</b>	
Agricultural possibilities of. 1870. p. 229.....	A27.9:8
Agriculture and climate of. 1871. p. 129.....	A27.9:9
Chinook in, report of (Pague). 1896. p. 460.....	A29.6:24
Crops of, per acre. 1865. No. 8. p. 26.....	A27.9:3
Eastern, agricultural resources of (Ritz). 1869. p. 384*.....	A27.9:7
Entomological work in, in 1893 (Koebele). p. 33.....	A9.3:32
Facts concerning (Drake). p. 584.....	A1.1:869
Farm resources and products of. 1868. p. 275.....	A27.9:6
Grasses of, plates and descriptions of (Vasey). 1892.....	A6.2:N82 <sup>2</sup>
same.....	A6.3:13
Hail and thunder storms in, notes on (Abbe). 1901. p. 262.....	A29.6:29
Hop louse in, experiments with (Koebele). 1893. p. 12.....	A9.7:6
Irrigation in, in 1890 (Nimmo). p. 149.....	A15.2:P94 <sup>1</sup>
Klamath Indians of, plants used by, (Coville). 1897. p. 87.....	A6.5:5
Long-range weather forecasts in (Abbe). 1895. p. 423.....	A29.6:23
Road improvement in—	
extract from governor's inaugural address (Geer). p. 8.....	A22.4:33
extract from governor's message (Lord). p. 7.....	A22.4:33
Seasonal forecasts for (Pague). 1897. p. 161.....	A29.6:25
same (Abbe). 1898. p. 253.....	A29.6:26
Sheep raising in. 1876. pp. 414, 479.....	A27.9:14
Storm warnings on coast of, note on (Abbe). 1900. p. 211.....	A29.6:28
Weather of, and Bering Sea ice, notes on, 1890-99 (Abbe). pp. 163, 206.....	A29.6:28
same (Beals). p. 201.....	A29.6:28
Weather forecasts for, notes on, 1895-99 (Abbe). p. 313.....	A29.6:27
<i>See also</i> Cascade Mountains—Lane County—Ontario—Pacific Northwest—Portland.	
Organic matter in plants, origin and formation of (Dehérain). 1898. p. 903.....	A10.6:9
Organic nitrogen. <i>See</i> Nitrogen.	
Orgyia leucostigma, parasites of, additional observations on (Howard). 1897. p. 15.....	A9.6:9
<b>Orient:</b>	
Export of California butter to (Pearson). p. 266.....	A4.1:899
same (reprinted). 1900.....	A4.3:24
<i>See also</i> Typhoons.	
Oriole, Baltimore, and meadow lark (Beal). 1895. p. 419.....	A1.10:895
Ormerod, Eleanor A. Insects, notes of season on. 1891. p. 36.....	A9.7:4
Ornithologist and mammalogist, annual reports of.....	A5.1:
<b>Ornithology:</b>	
Agricultural, report on (Michener). p. 287.....	A1.1:863
Economic—	
establishing branch of, circular relating to. 1885.....	A9.4:18
report on (Barrows). p. 193.....	A1.1:892
same, p. 193.....	A5.1:892
review of, in U. S. (Palmer). 1899. p. 259.....	A1.10:899
<i>See also</i> Birds.	

\* By a misprint, this page number appears twice.

# Index

	Classification no.
Ornithology and Mammalogy Division. <i>See</i> Biological Survey, Agriculture Department .....	A5.
Ornithology and mammalogy of New England, with reference to agricultural economy (Samuels). p. 265 .....	A1.1:863
Ortalid fly injuring growing cereals. 1895. p. 352.....	A9.7:7
Orthezia insignis as garden pest (Cockerell). 1892. p. 89.....	A9.7:5
Orthoptera:	
New species of, from Death Valley expedition (Bruner). 1893. p. 266 .....	A5.5:7
Systematic position of, in relation to other orders of insects. 1883. p. 286 .....	A8.1:3
Orton, W. A.:	
Plant diseases in United States. 1901. p. 668.....	A1.10:901
Wilt disease of cotton and its control. 1900 .....	A28.3:27
Wilt disease of cowpea and its control. 1902.....	A19.3:17
<i>See also</i> , as joint author, Webber, Herbert John.	
Osage hedges, uses of, etc. p. 245.....	A1.1:868
Osage orange as feed for silk-worms. 1870. p. 430 .....	A27.9:8
Osage orange pyralid (Murtfeldt). 1893. p. 155 .....	A9.7:5
Osborn, Herbert:	
Chinch bug observations in Iowa in 1894. 1894. p. 230.....	A9.7:7
Entomological work in agricultural experiment stations. 1895. p. 85 .....	A10.3:24
Entomology, economic, duty of. 1898. p. 6 .....	A9.6:17
Grass insects in Washington, D. C., notes on. 1891. p. 197.....	A9.7:4
Hessian fly in United States. 1898.....	A9.6:16
Insect occurrences, some notable, in Ohio for first half of 1902. 1902. p. 115.....	A9.6:37
Insecticide experiments at Ames, Iowa. 1886. p. 23 .....	A9.3:11
Insects, injurious, use of contagious diseases in contending with. 1890. p. 141.....	A9.7:3
Insects affecting domestic animals. 1896 .....	A9.6:5
Insects affecting grasses and forage plants, methods of treating. 1893. p. 71.....	A9.7:6
Iowa insects reported to Association of Economic Entomologists—	
1892. p. 111 .....	A9.7:5
1893. p. 193 .....	A9.7:6
1896. p. 78 .....	A9.6:6
Iowa, insects of—	
1887. p. 154 .....	A1.1:887
1889. p. 18 .....	A9.3:22
1890. p. 57 .....	A9.3:23
1891. p. 57 .....	A9.3:26
1892. p. 42 .....	A9.3:30
1893. p. 46 .....	A9.3:32
Kansas, trip to, to investigate reported damages from grasshoppers—	
paper read before Association of Economic Entomologists. 1891. p. 49 .....	A9.7:4
report on. p. 58.....	A9.3:27
Kerosene emulsions, experiments with. 1891. p. 63 .....	A9.7:4
Mallophaga, development in, notes on period of. 1890. p. 115..	A9.7:3
Mallophaga and pediculidæ, parasitic habit in, origin and development of. 1891. p. 187.....	A9.7:4
Missouri, northwest, grasshopper injuries in, report on trip to investigate. 1893. p. 323 .....	A9.7:5
Parasites of domestic animals, methods of attacking. 1893. p. 163.	A9.7:6
Pediculi and mallophaga affecting man and lower animals. 1891.	A9.3:7
Schizoneura panicola thos. and S. corni fab., identity of. 1889. p. 108 .....	A9.7:2
Thripidæ, food habits of. 1888. p. 137.....	A9.7:1
Osborn, Herbert, and Gossard, H. A. Clover-seed caterpillar, report on. 1891. p. 56.....	A9.7:4
Osborn, Herbert, and Sirrine, F. A. Aphididæ, notes on. 1893. p. 235 .....	A9.7:5
Osborn, J. M. Crops in Indiana and Illinois. 1891. p. 483 .....	A27.9:29

Osborne, William McKinley. Animals, dead, disposition of, in London. p. 346 .....	A4.1:899
Oscillation period of Lake Erie, note on (Harris). 1902. p. 312....	A29.6:30
Oscillations of lake level, notes on (Abbe). 1900. p. 446 .....	A29.6:28
Oscinidæ, reared at United States Department of Agriculture, habits of (Coquillett). 1898. p. 70 .....	A9.6:10
Osgood, Wilfred H.: Natural history of Queen Charlotte Islands, British Columbia, and Cook Inlet region, Alaska. 1901 .....	A5.5:21
Pocket mice of genus <i>Perognathus</i> , revision of. 1900.....	A5.5:18
Yukon region, mammals of. 1900. p. 21 .....	A5.5:19
Yukon River region, general account of. 1899. p. 7 .....	A5.5:19
Osier culture (Simpson). 1898 .....	A13.3:19
Osier willow: Culture and economic importance of. p. 254 .....	A1.1:873
Notes on (Watts). 1873. p. 419 .....	A27.9:11
Osteomalacia or creeps. <i>See</i> Cattle.	
Osteoporosis. <i>See</i> Horses.	
Ostrich farming in America (Duncan). p. 685.....	A1.1:888
Otis, D. H. <i>See</i> , as joint author, Cottrell, H. M.	
Ottawa, Illinois, swine plague at (Dyer). 1879. p. 156.....	A1.6:12
Ottawa, Kans., diffusion and carbonatation at, experiments with (Wiley). 1885 .....	A7.3:6
Outram, Thomas S.: Washouts, floods, cold waves, and heavy snowfalls, warnings of, for benefit of transportation companies. 1899. p. 38 .....	A29.3:24
Weather Bureau stations, is exposure at, satisfactory for all instruments? 1902. p. 216 .....	A29.3:31
Overflow lands. <i>See</i> Swamp and overflow land.	
Ovine caseous lymph adenitis, nature, cause, and economic importance of (Nørgaard and Mohler). p. 638 .....	A4.1:899
Owen, D. A. Stomata, strange developments of, on <i>Carya alba</i> caused by <i>Phylloxera</i> . 1892. p. 327 .....	A9.7:4
Owen, Richard. Industrial colleges; general plan of buildings, with necessary aids to instruction in each department of education. 1864.....	A27.2:In2
Owens, James E. State aid to road construction in New Jersey. 1901. p. 22 .....	A22.3:21
Owl: Common screech, report on (Fisher). p. 372.....	A1.1:889
same, p. 372 .....	A5.1:889
Short-eared, special report on (Fisher). p. 496 .....	A1.1:888
same, p. 496 .....	A5.1:888
<i>See also</i> Hawks and Owls.	
Ox bot in United States (Riley). 1892. p. 302.....	A9.7:4
Ox warble: Circular relative to (Marlatt). 1897.....	A9.5:25
Report on. 1889. p. 172 .....	A9.7:2
Oxalic acid, action of, upon phosphates, silicates, and soil (Kastle and others). 1894. p. 53.....	A7.3:43
Oxeye daisy, a beautiful flower and a pernicious weed (Beal). 1899. p. 15 .....	A1.9:103
Pachybasium, attendant, Minnesota species of, note on (MacMillan). 1891. p. 75 .....	A28.5:6
Pachyneuron, habits of (Howard). 1891. p. 218 .....	A9.7:3
Pacific coast: Climate of (Merrick). p. 280 .....	A1.1:867
Evotomys from, description of (Merriam). 1890. p. 25 .....	A5.5:4
Field crops and animal industries of (Jones). 1892. p. 59.....	A1.8:20
Fruit growers on, irrigation practice among (Wickson). 1902 ...	A10.3:108
Grape diseases on (Pierce). 1895 .....	A1.9:30
Grass and forage plant investigations on (Scribner). 1899.....	A3.4:22
Grasses, notes on some (Vasey). 1893. p. 265.....	A6.5:1
Hop production of. 1889. p. 410 .....	A27.9:27
Low areas on our (Abbe). 1896. p. 418.....	A29.6:24

# Index

Classification no.

## Pacific coast—Continued

### North—

high areas of, in September, October, and November (Garriott).

1895. p. 249

weather map of, explanation of (Moore)

States of, seasonal forecasts for, long range (Ashley). 1901. p. 16.

Weather on, of August, notes on (Abbe). 1899. p. 421

Weather service on, possibilities of (Hammon). 1899. p. 56

same (Pague). 1899. p. 63

Wheat growing and general agricultural conditions in (Holmes).

1901

Wheat ports on (Holmes). 1901. p. 567

Work of Division of Entomology (Henry). 1889. p. 141

*See also*—Pacific Northwest—Pacific slope—Pacific States—and names of States.

Pacific coast division of Canadian meteorological service, notes on (Abbe). 1899. pp. 102, 212

### Pacific Northwest:

Orchard enemies in (Piper). 1902

Precipitation over, and possibility of high water in Columbia [river] from melting snow in mountains (Pague). 1899. p. 252

Prune culture in (Lake). p. 41

same, reprinted

Prunes and prune culture in, existing conditions, etc., 1901 (Lake)

Sheep husbandry in (Withcombe). 1900. p. 5

*See also*—Northwest—and names of States.

### Pacific Ocean:

Date line in (Page). 1902. p. 363

Storm centers in, notes on (Abbe). 1899. p. 114

### Pacific slope:

Arid regions of, climatic and agricultural features of, etc. (Hilgard and others). 1882

Climates of (Hilgard). 1892. p. 9

Field cultures on, miscellaneous (Hilgard). 1892. p. 79

Grasses of, including Alaska and adjacent islands. 2 pts. (Vasey).

same, reissued. 1893

### North—

weather forecasting and weather types on (Pague and Blandford). 1897

weather types of (Pague). 1895. p. 417

*See also*—Pacific Northwest—Pacific States—and names of States.

### Pacific States:

Agriculture of Territories and. 1865. No. 5. p. 18; No. 10. p. 24.

Crops in, 1864. No. 5. p. 19

Textile fibers of (Flint). p. 471

*See also*—Pacific Northwest—Pacific slope—and names of States.

### Packard, Alpheus Spring:

*Bucculatrix canadensisella*, occurrence of, on birch in Rhode Island. 1892. p. 14

*Calothyranis amaturaria*, a geometrid moth, life history of. 1892. p. 382

Evergreen and other forest trees, causes of destruction of, in northern New England and New York—

[1st] report. 1883. p. 138

same, p. 138

2d report. 1884. p. 374

3d report, in northern New England. p. 319

same, additions. p. 17

4th report. 1886. p. 20

5th report. 1887

Forest-tree insects, notes on. 1883. p. 24

Hen flea (*Sarcopsylla gallinacea*), occurrence of, in Florida. 1894. p. 23

Insects injurious to forest trees in 1893, report on. p. 53

Packard, Alpheus Spring, entomological writings of (Henshaw)

Pade, L. Milk, bicarbonate of soda in, detection of. 1889. p. 170.

Page, E. D. *See* Graves, Henry S.

	<b>Index</b>
	<b>Classification no.</b>
Page, J. W. Scuppernong wine, analysis of. 1868. p. 362.....	A27.9:6
Page, James:	
Barograph on shipboard, report of. 1900. p. 590.....	A29.6:27
Date line in Pacific Ocean. 1902. p. 363 .....	A29.6:30
Ocean currents. 1902. p. 397.....	A29.6:30
Page, John R. Lands, worn-out, improvement of. 1883. p. 207..	A1.7:2
Page, John R., and Terrell, J. J. Glanders and farcy in horses. 1880. p. 202 .....	A1.6:22
Page, Logan Waller. Macadam roads, selection of materials for. 1900. p. 349 .....	A1.10:900
<i>See also</i> , as joint author, Ewell, Ervine Edgar.	
Page County, Iowa, hog cholera in, experiments in stamping out. 1889. p. 249 .....	A4.1:898
Pague, Bemer S.:	
Chinook winds in Oregon, report of. 1896. p. 460.....	A29.6:24
Lightning from cloudless sky. 1900. p. 429.....	A29.6:28
Long-range weather forecasts, report of. 1896. p. 166.....	A29.6:24
Oregon, seasonal forecasts for. 1897. p. 161.....	A29.6:25
Precipitation over Pacific Northwest and possibility of high wa- ter in Columbia river from melting snow in mountains. 1899. p. 252 .....	A29.6:27
Weather Bureau, official of, his duties and qualifications. 1899. p. 170.....	A29.3:24
Weather Bureau instrument shelter. 1893. p. 27 .....	A29.3:7
Weather forecasts, long-range. Can they be made with suffi- cient precision to be of general utility? 1899. p. 46 .....	A29.3:24
Weather service on Pacific coast, possibilities of. 1899. p. 63...	A29.3:24
Weather types of North Pacific slope. 1895. p. 417 .....	A29.6:23
Pague, Bemer S., and Blandford, Samuel M. Weather forecasting and weather types on North Pacific slope. 1897.....	A29.2:P11
Painesville, Ohio. <i>See</i> Lake Erie College.	
Palm. <i>See</i> Date palm.	
Palm and palmetto weevils (Chittenden). 1902. p. 23.....	A9.6:38
Palmer, Edward. <i>See</i> , as collector, Eckfeldt, J. W.—Scribner, Frank Lamson—Vasey, George, and Rose, Joseph Nelson.	
Palmer, Theodore Sherman:	
Animals and birds, noxious, danger of introducing. 1898. p. 87.	A1.10:898
Birds and game, protection of, directory of State officials and or- ganizations for 1901 .....	A5.4:33
same, 1902 .....	A5.4:35
Birds and game in District of Columbia, laws for protection of. 1901 .....	A5.4:34
Birds other than game birds, legislation for protection of. 1900..	A5.3:12
Death Valley expedition, 1891, localities visited by, list of. 1893. p. 361.....	A5.5:7
Extirmination of noxious animals by bounties. 1896. p. 55....	A1.10:896
Jack rabbit of United States .....	A5.3:8
Ornithology, economic, in U. S., review of. 1899. p. 259.....	A1.10:899
<i>See also</i> , for report as acting Chief, Biological Survey, 1898-1901 ..	A5.1
Palmer, Theodore Sherman, and Olds, Henry Worthington:	
Game—	
information concerning seasons, shipment, and sale of. 1900..	A5.4:31
transportation and sale of, laws regulating. 1900 .....	A5.3:14
Game laws for 1901, digest of .....	A5.3:16
same, 1902 .....	A1.9:160
Palmer, W. S.:	
Meteorological data collected, use of. 1902. p. 178.....	A29.3:31
Meteorological observations, should not a book providing for per- manent record of, be furnished to section centers and volun- tary stations? 1899. p. 122.....	A29.3:24
Wyoming, water supply of, for season of 1900, as depending on snowfall. p. 498.....	A29.6:28
Palms. <i>See</i> Coconut palms.	
Pammel, L. H.:	
Cucurbits, crossing of. 1893. p. 94.....	A10.3:16
Fungous diseases of Iowa, new. 1891. p. 95.....	A28.5:7
Grasses and forage plants of Iowa, Nebraska, and Colorado. 1897.	A3.3:9



# Index

	Classification no.
Pampas, The:	
Cattle farming in (Carrow). p. 486.....	A1.1:865
Sheep farming in (Carrow). p. 223.....	A1.1:864
Pamperos and cyclonic storms, notes on (Abbe). 1899. p. 154 ....	A29.6:27
Pan-American Exposition. See Buffalo, N. Y.	
Pan-American trade, 1890. p. 454.....	A27.9:28
Panama, Isthmus of, climatology of, including temperature, winds, barometric pressure, and precipitation (Abbot). 1899. pp. 198, 302.....	A29.6:27
Panama, meteorology of:	
Contributions to (Abbot). 1899. p. 7.....	A29.6:28
Report of (Abbot). 1899. p. 463.....	A29.6:27
Panchlora, further notes on (Riley). 1891. p. 119.....	A9.7:4
Panicum nashianum, new variety of. p. 9.....	A3.4:27
Panicum nitidum, Panicum scoparium, and Panicum pubescens, notes on (Scribner and Merrill). 1900. p. 31.....	A3.3:24
Panicums:	
American, in herbarium Berolinense and in herbarium of Willde- now (Holm). 1897. p. 17.....	A3.3:4 }
Three new species of, notes on (Scribner and Merrill). 1901. p. 3.....	A3.4:35
Paparelli, L.:	
Agricultural education in Italy. 1893. p. 326.....	A10.6:4
Italy, institutions for agricultural investigation in. 1893. p. 233.....	A10.6:4
Paper. See Japanese paper—Maize-paper.	
Paper-making wasp, use of grape bags by (Murtfeldt). 1891. p. 192.....	A9.7:4
Paraguay:	
Agriculture in. 1891. p. 610.....	A27.9:29
Butter in (Ruffin). p. 521.....	A4.1:898
Parasites:	
Cattle, sheep, and swine, compendium of, arranged according to their hosts (Hassall). 1898. p. 137.....	A4.3:19
Cotton stainer, supposed eggs of (Howard). 1889. p. 241.....	A9.7:1
Domestic animals, methods of attacking (Osborn). 1893. p. 163.	A9.7:6
Economic value of (Smith). 1893. p. 142.....	A9.7:6
External spider (Howard). 1888. pp. 42, 106.....	A9.7:1
Fungous, on Aleyrodes citri, preliminary notice of (Webber). 1891. p. 363.....	A28.5:7
Grain plant-louse, new (Howard). 1890. p. 246.....	A9.7:2
Hymenopterous—	
host relations of (Howard). 1891. p. 277.....	A9.7:3
of California red scale (Howard). 1894. p. 227.....	A9.7:6
of Coleoptera, observations on some (Chittenden). 1893. p. 247.....	A9.7:5
Icerya—	
new, report of (Howard). 1892. p. 378.....	A9.7:4
three new (Howard). 1889. p. 268.....	A9.7:1
Injurious, report of (Howard). 1895. p. 402.....	A9.7:7
Lady-bird, report on (Riley). 1888. p. 101.....	A9.7:1
Mytilaspis pomorum, new (Howard). 1894. p. 256.....	A9.7:7
Note on (Howard). 1891. p. 48.....	A9.7:4
Orgyia leucostigma, additional observations on (Howard). 1897. p. 15.....	A9.6:9
Scale-insects, two important (Howard). 1894. p. 5.....	A9.7:7
Spider, new, report of (Ashmead). 1894. p. 259.....	A9.7:6
Spider-egg, two (Howard). 1890. pp. 269, 359.....	A9.7:2
same (Howard). 1891. p. 202.....	A9.7:4
See also Animal parasites—Apheleninae—Aphelinus fascipen- nis—Australian parasite—Cercospora circumscissa—Ces- todes—Chalcididae—Chicken-tick—Coccidia—Dipterous parasite—Egyptian strongyle—Elasmus—Insects—Joint- worm—Mallophaga and pediculidae—Mantis egg-parasites— Megilla parasite—Pachyneuron—Phytoptus distortions— Pimpla conquisitor—Pine leaf rust—Platypsyllus—Pseudo- manas hyacinthi—Roundworms—Sarcapidae—Sarcospo-	



<b>Parasites—Continued</b>	
ridia — Sheep scab mite — Southern cattle ticks — Spider-egg parasites — Spider parasites — Sporozoon — Tachinidæ — Ticks — Trichina spiralis — Trypanosomiasis — Ugimya sericarlæ — Vinegar eel.	
Parasitic bronchitis. See Bronchitis.	
Parasitic diseases. See Diseases of animals—Grape vine.	
Parasitic two-winged insects. See Tachinidæ.	
<b>Parasitism:</b>	
Among Sarcoptidæ, origin and development of (Garman). 1891. p. 182 .....	A9.7:4
Case of excessive (Howard). 1897. p. 62 .....	A9.6:7
Host, color of, and its relation to (Stiles and Hassall). 1892. p. 265 .....	A9.7:4
Spurious, due to partially digested bananas (Stiles and Hassall). 1902. p. 58 .....	A4.3:35
Parhelion, note on, of Jan. 27, 1895 (Abbe). p. 14 .....	A29.6:23
<b>Paris:</b>	
American horses used by large horse companies in (Loncey). 1898. p. 42 .....	A1.2:H78
Butter and cheese markets (Ashby). p. 220 .....	A4.1:899
Dead animals in, disposition of (Gowdy). p. 348 .....	A4.1:899
Egg market of (Ashby). p. 336 .....	A4.1:899
Entomological exhibition at, Aug. and Sept., 1865 (Glover). p. 88 .....	A1.1:865
Poultry markets of (Ashby). p. 341 .....	A4.1:899
Ramie machine trials in, in 1889 (Dodge). 1892. p. 32 .....	A27.8:1
same, 2d ed. p. 32 .....	A11.5:1
Paris Exposition of 1867, report of committee on culture and products of vine, made to U. S. Commissioners (Wilder and others). p. 163 .....	A1.1:867
Paris Exposition of 1889, papers accompanying exhibit of Bureau of Animal Industry at. p. 359 .....	A4.1:887-8
<b>Paris Exposition, 1900:</b>	
Agricultural experiment station veterinarians, exhibit at (Peters). 1898. p. 22 .....	A4.3:22
Agricultural experiment stations, collective exhibit at—	
catalogue of (Evans). 1900. p. 633 .....	A10.3:80
committee report on preparation and care of—	
1898 (Harris). p. 43 .....	A10.3:49
1899 (Armsby). p. 30 .....	A10.3:65
1900 (Armsby). p. 20 .....	A10.3:76
1901 (Armsby). p. 23 .....	A10.3:99
editorial on. 1901. p. 301 .....	A10.6:12
Dairy awards for United States at. p. 734 .....	A1.10:900
Dairy products at (Alvord). 1900. p. 599 .....	A1.10:900
same. p. 194 .....	A4.1:900
Meats and meat products at (Alvord). p. 223 .....	A4.1:900
Weather Bureau at, notes on (Abbe). 1900. p. 445 .....	A29.6:28
World's exhibit of leaf tobacco at. p. 157 .....	A1.10:900
Paris, International Congresses of Horticulture, Viticulture, and Agriculture, 1901 (Evans). p. 205 .....	A10.6:12
Paris, International Industrial Fair, 1867, note on. No. 10. p. 20 .....	A27.9:3
Paris, International Meteorological Conference, Sept., 1896, report on (Rotch). p. 365 .....	A29.6:24
Same (Scott). 1896. p. 333 .....	A29.6:24
Paris, International Meteorological Conference, Sept., 1896, responses to programme of questions proposed for discussion at .....	A29.2:P21
Paris, International Meteorological Congress, Sept., 1900, notes on (Abbe). pp. 19, 544 .....	A29.6:28
Same (Abbe). p. 265 .....	A29.6:29
Paris, Tenth International Congress of Hygiene and Demography, held August 10-16, 1900 (De Schweinitz). p. 260 .....	A4.1:900
Paris, Thirteenth International Medical Congress, held August 4, 1900 (De Schweinitz). p. 254 .....	A4.1:900
<b>Paris green:</b>	
As protection against cotton insects (Glover). 1873. p. 572 .....	A27.9:11

# Index

Classification no.

Paris green—Continued	
Experience with (Cockerell). 1897. p. 25 .....	A9.6:9
Its use in agriculture (McMurtrie). 1874. p. 507 .....	A27.9:12
Low-grade, use of, to fruit-growers (Wilcox). 1900. p. 14 .....	A1.9:114
Notes on (Marlatt). 1895. p. 408 .....	A9.7:7
Poisonous effect of (McMurtrie). 1875. p. 231 .....	A27.9:13
Parker, S. J.:	
Grapes, native, improvement of, by seedlings and hybridization. p. 122 .....	A1.1:864
Grapes, new varieties of. p. 194 .....	A1.1:865
Parkinson, W. L. Sorghum-sugar industry at Fort Scott, Kans., in 1887. p. 226 .....	A1.1:887
Same. 1887. p. 26 .....	A7.3:17
Parry, C. C.:	
Botanical explorations in East Tennessee. 1870. p. 221 .....	A27.9:8
Cinchona planting in Jamaica. 1871. p. 120 .....	A27.9:9
North American desert flora between 32° and 42° north latitude. 1871. p. 23 .....	A27.9:9
See also, for reports as Botanist, Botany Division, Agriculture Department. 1869-71 .....	A6.1:
Parsnip web-worm, report on (Riley). 1888. p. 94 .....	A9.7:1
Same (Southwick). 1892. p. 106 .....	A9.7:5
Parsons, E. M. Acid and alkaline solutions, standardization of, comparison of methods for. 1892. p. 80 .....	A7.3:35
Parsons, George H. Climate of Colorado and its effect on trees. 1888. p. 221 .....	A13.3:2
Partridge, Edward A. Barometer, method of filling. 1896. p. 413.	A29.6:24
Parturition, diseases following, in cattle (Law). p. 235 .....	A4.2:C29 <sup>1</sup>
Passer domesticus. See House sparrow.	
Passer montanus. See European tree sparrow.	
Pasteurization. See Milk.	
Pasteurized cream, restoring consistency of. 1898. p. 23 .....	A1.9:69
Pastoral lands of America. p. 301 .....	A1.1:870
Pastoral resources of Montana (Anderson). p. 311 .....	A1.1:888
Same, p. 311 .....	A6.1:888
Pastrana, Manuel E. Mexican climatological data, monthly notes on, Sept., 1899-Oct., 1902 .....	A29.6:
Pasture plants, our native (Scribner). 1900. p. 581 .....	A1.10:900
Pastures. See Cattle ranges of Southwest — Meadows and pastures.	
Patagonia, southern:	
Ferns from, collected by U. S. S. Albatross in 1887-91, list of (Eaton). 1892. p. 138 .....	A6.5:1
Lichens from, collected by U. S. S. Albatross in 1887-91, list of (Eckfeldt). 1892. p. 142 .....	A6.5:1
Liverworts from, collected by U. S. S. Albatross in 1887-91, list of (Evans). 1892. p. 140 .....	A6.5:1
See also Fuegia and Patagonia.	
Patents:	
Agricultural, of year 1869. p. 315 .....	A1.1:869
same. 1871. p. 211 .....	A1.1:871
Fiber machinery and processes, list of, Jan., 1875, to Dec. 31, 1879. p. 609 .....	A1.1:879
Hydrocyanic-acid gas process declared invalid (Coquillett). 1894. p. 257 .....	A9.7:7
Metal railway track (Tratman). 1889. p. 36 .....	A13.3:3
same (Tratman). 1890. p. 326 .....	A13.3:4
Pathogenic bacteria. See Bacteria — Milk and its products.	
Pathological conditions found in meat inspection (Salmon). p. 52 ..	A4.1:900
Pathology of plants, lines of investigation that might be undertaken by experiment stations (Galloway). 1897. p. 725 .....	A10.6:7
Patrick, George Edward:	
Butter, renovated, report on identification of. 1902. p. 115 ....	A7.3:67
Distilling flask, new, for use in Kjeldahl process. 1891. p. 142 ..	A7.3:31
Fat acids, soluble and insoluble, notes on methods for. 1888. p. 25 .....	A7.3:19

<b>Patrick, George Edward—Continued</b>	
Household tests for detection of oleomargarine and renovated butter. 1901 .....	A1.9:131
Milk, composite, samples in laboratory. 1891. p. 26 .....	A7.3:31
Milk test, standard, report on. 1891. p. 123 .....	A10.5:3
Patrick method of determination of fat in milk. 1889. p. 163 .....	A7.3:24
<b>Patrons of Husbandry:</b>	
List of officers—	
1898. p. 624 .....	A1.10:898
1899. p. 717 .....	A1.10:899
1900. p. 671 .....	A1.10:900
1901. p. 637 .....	A1.10:901
Twenty-sixth annual meeting of, Concord, N. H., Nov., 1892. p. 386 .....	A27.9:30
Patterson, F. W. Live-stock interests of Maryland. p. 254 .....	A4.1:886
Same, p. 466 .....	A4.1:887-8
Patterson, Flora W. Fungi, economic and other, collection of, prepared for distribution. 1902 .....	A19.3:8
Patterson, Harry Jacob. Animal, live weight of, what is the? 1893. p. 150 .....	A10.3:16
Patterson, J. K. Education at agricultural colleges, general drift of. 1901. p. 99 .....	A10.3:99
Patterson, Robert F. Calcutta, hides and skins from, imports of. p. 523 .....	A4.1:898
<b>Patterson, S. L.:</b>	
Address of, before good roads convention, at Winston-Salem, N. C. 1902. p. 13 .....	A22.3:23
North Carolina, farmers' institute work accomplished in. 1902. p. 40 .....	A10.3:120
<b>Pattersonville, La. See Calumet plantation sugar experiment station.</b>	
<b>Patton, W. M.:</b>	
Highways, public, alignment of. 1902. p. 74 .....	A22.3:23
Roads, location and construction of. 1902. p. 30 .....	A22.3:25
Patton, Wm. Hampton. Ephestia interpunctella zeller, notes upon. 1890. p. 158 .....	A9.7:3
Paular sheep. p. 354 .....	A1.1:866
Paullin, C. O. Porto Rican hurricane of 1899. p. 443 .....	A29.6:28
Paulsen, Adam. Denmark, climate of. 1896. p. 640 .....	A29.3:11 <sup>a</sup>
Payne, Alban S. Swine-plague in Virginia. 1879. p. 165 .....	A1.6:12
<b>Pea. See Peas.</b>	
<b>Pea louse, destructive, new and important economic species of genus Nectarophora (Johnson). 1899. p. 94 .....</b>	
<b>Pea and bean weevils, report of. 1892. p. 297 .....</b>	
<b>Pea weevil:</b>	
Larval stage of, first. 1892. p. 392 .....	A9.7:4
Report of. 1892. p. 297 .....	A9.7:4
Peabody, Selim H. Agricultural institutions founded on Congressional grant of 1862, what work is legitimate to? 1882. p. 42. ....	A1.8:22
<b>Peach blight:</b>	
Note on (Smith). 1891. p. 36 .....	A28.5:7
Peach rot and, report on (Smith). 1889. p. 123 .....	A28.5:5
<i>See also Peaches.</i>	
Peach curculio, arsenical poisons for (Forbes). 1889. p. 3 .....	A9.7:2
Peach leaf curl, its nature and treatment (Pierce). 1900 .....	A28.3:20
Peach lecanium, report on (Pergande). 1898. p. 26 .....	A9.6:18
Peach pest in Bermuda. 1890. p. 5 .....	A9.7:3
<b>Peach rosette:</b>	
Communicability of (Smith). 1891 .....	A28.3:1
Notes on (Smith). 1891. p. 226 .....	A28.5:7
Peach yellows and (Smith). 1894 .....	A1.9:17
Report on (Smith). 1891. p. 143 .....	A28.5:6
Peach rot and peach blight, report on (Smith). 1889. p. 123 .....	A28.5:5
Peach-tree borer, circular relative to (Marlatt). 1896 .....	A9.5:17
Peach-tree scale, new and destructive. 1894. p. 287 .....	A9.7:6
<b>Peach trees:</b>	
Leaf curl of, letter of inquiry relative to (Willits). 1893 .....	A28.4:13
Winter protection of. 1898. p. 17 .....	A1.9:78

# Index

	Classification no.
<b>Peach twig-borer:</b>	
Important enemy of stone fruits (Marlatt). 1898 .....	A1.9:80
Report on (Marlatt). 1898. p. 7 .....	A9.6:10
<b>Peach yellows:</b>	
Communicability of (Smith). 1891 .....	A28.3:1
Note on (Taylor). 1872. p. 387 .....	A27.9:10
Peach rosette and (Smith). 1894 .....	A1.9:17
Preliminary report on (Smith). 1888 .....	A6.3:9
Prevention and cure of, experiments with fertilizers for, 1889-92. (Smith) .....	A28.3:4
Statements on. 1887. p. 372 .....	A27.9:25
What to do for? (Smith). 1891. p. 15 .....	A28.5:6
<b>Peaches:</b>	
Blight or mildew of, sulphur for. 1867. p. 60 .....	A27.9:5
Classification of varieties of (Price). 1898. p. 82 .....	A10.3:49
Culture of, notes on (Hale). p. 50 .....	A20.1:894
same, reprinted .....	A20.4:3
Different races of, report of progress by committee on cooperative work in testing. 1899. p. 129 .....	A10.3:65
Field notes on, 1891 (Smith). 1891. p. 88 .....	A28.5:7
Food value of (Langworthy). 1899. p. 22 .....	A1.9:105
Growing for market (Smith). 1895 .....	A1.9:33
Japanese fruit worm, report on. 1889. p. 64 .....	A9.7:2
New species of aphid injurious to, in Georgia, preliminary note on (Scott). 1902. p. 56 .....	A9.6:31
Propagation, cultivation, varieties, etc. (Pullen). p. 191 .....	A1.1:865
Root-knot disease of, in Florida, due to work of Anguillula (Neal). 1889 .....	A9.3:20
Spotting of, report on (Smith). 1889. p. 32 .....	A28.5:5
<b>Peaches and other fruits in England</b> .....	A12.4:1
<b>Peanut oil-cake as food for animals.</b> 1873. p. 445 .....	A27.9:11
<b>Peanuts:</b>	
Crop in Virginia. 1875. p. 512 .....	A27.9:13
Cultivation of. p. 220 .....	A1.1:868
Culture and uses (Handy). 1895 .....	A1.9:25
Food for hogs (Duggar). p. 501 .....	A4.1:898
Production of, 1875-90. p. 640 .....	A27.9:28
<b>Pear:</b>	
Aphids of (Sanderson). 1902. p. 123 .....	A10.3:115
Commercial culture of (Waite). 1900. p. 369 .....	A1.10:900
Culture of, remarks on. p. 198 .....	A1.1:869
Description of leading popular varieties. p. 163 .....	A1.1:862
same (Elliott). p. 119 .....	A1.1:863
Summer, new variety of. 1867. p. 59 .....	A27.9:5
<i>See also</i> Le Conte pear.	
<b>Pear blight:</b>	
Cause and prevention of (Waite). 1895. p. 295 .....	A1.10:895
Report on (Arthur). p. 125 .....	A1.1:886
same, p. 125 .....	A28.1:886
<b>Pear flowers, pollination of (Waite)</b> .....	A28.3:5
<b>Pear insect, new, report on.</b> 1894. p. 258 .....	A9.7:7
<b>Pear leaf blight:</b>	
Experiments in treatment of. 1889 .....	A28.4:8
Treatment of, in orchard (Waite). 1891. p. 333 .....	A28.5:7
<b>Pear-leaf blister mite, report on (Slingerland).</b> 1892. p. 104 .....	A9.7:5
<b>Pear midge, habits of (Schmidberger).</b> p. 286 .....	A1.1:885
<b>Pear scab, treatment of (Galloway).</b> 1891. p. 11 .....	A28.5:6
<b>Pear slug, circular relative to (Marlatt).</b> 1897 .....	A9.5:26
<b>Pear-tree blight, report on (Taylor).</b> 1872. p. 225 .....	A27.9:10
<b>Pear-tree psylla:</b>	
Circular relative to (Marlatt). 1895 .....	A9.5:7
Maryland (Marlatt). 1894. p. 175 .....	A9.7:7
Report on. 1893. p. 226 .....	A9.7:5
same (Slingerland). 1892. p. 100 .....	A9.7:5
Three, report on. 1891. p. 127 .....	A9.7:4
<b>Pear trees, experiments with fungicides in removal of lichens from     (Waite).</b> 1891. p. 264 .....	A28.5:7

	<b>Index</b>
	<b>Classification no.</b>
Pearne, Thomas H. Foot-and-mouth disease, treatment for. 1873. p. 450 .....	A27.9:11
Pearson, Alexander W.:	
Grape rot and grape mildew, remarks on. 1886. p. 54.....	A6.3:2
Grape-vine, downy mildew and black-rot of, treatment of with salts of copper, at Vineland, N. J., in 1887. p. 17.....	A6.3:5
same. 1888. p. 13 .....	A6.3:10
Plants, fungus diseases of. 1890. p. 41 .....	A6.3:11
Pearson, Raymond Allen:	
Cheese, colored spots in. p. 229 .....	A4.1:898
same .....	A4.4:24
Cows and cattle of foreign countries. 1896. p. 38 .....	A4.3:11
Dairy industry and dairy markets of Porto Rico; with notes upon St. Thomas and Cuba. p. 306 .....	A4.1:901
Dairy laws, national and State, abstract of. p. 531.....	A4.1:897
same, compilation of. 1900.....	A4.3:26
Dairy schools. 1896 .....	A4.3:17
Dairy utensils, care of. 1896. p. 431 .....	A1.10:896
Dairying in California and export of California butter to Orient. p. 266 .....	A4.1:899
same (reprinted). 1900 .....	A4.3:24
Milk, facts about. 1896 .....	A1.9:42
Market milk, plan for its improvement. p. 158.....	A4.1:900
Milk, care of, on farm. 1897 .....	A1.9:63
Oleomargarine, oleo oil, and filled cheese, statistics of, 1886-99. p. 287 .....	A4.1:899
same. 1900 and 1901. p. 398 .....	A4.1:901
Peas:	
Canadian field (Shaw). 1895. p. 223.....	A1.10:895
Insects injurious to (Chittenden). 1898. p. 233.....	A1.10:898
<i>See also</i> Flat pea.	
Peas, beans, and other legumes as food (Abel). 1900 .....	A1.9:121
Peat. <i>See</i> Muck.	
Pecan:	
Budding the (Oliver). 1902.....	A19.3:30
Culture of (Smith). 1901. p. 16 .....	A1.9:124
Pech, F. Sorghum, botanical history of. p. 299 .....	A1.1:865
Peck, C. H. Black knot of plum and cherry trees. p. 175 .....	A1.1:872
Peck, J. B. <i>See</i> , for report as Chief, Seed Division, Agriculture Department, 1890-92 .....	A24.1
Pecos River and its tributaries, New Mexico, irrigation along (Reed). 1902. p. 61 .....	A10.3:104
Pecos Valley, New Mexico—	
Irrigation in, use of water in (Reed). 1900. p. 85.....	A10.3:86
Soil survey in (Means and Gardner). 1900. p. 36.....	A1.8:64
Soils of (Means and Gardner). n. d. ....	A26.4:3
Pediculi affecting man and lower animals (Osborn). 1891.....	A9.3:7
Pediculidæ, parasitic habit in, origin and development of (Osborn). 1891. p. 187 .....	A9.7:4
Peffer —. Horticulture in Wisconsin. 1882. p. 174 .....	A1.8:22
Pegomyia, beet-leaf, report on (Howard). 1895. p. 379.....	A9.7:7
Pelee, Mount, Martinique, eruption of, noises attending (Abbe). 1902. p. 269 .....	A29.6:30
Pemberton's method of phosphoric acid determination, comparison of, with official method by Francis Bergami (Kilgore). 1894. p. 97 .....	A7.3:43
Pen, number of laying hens that may be profitably kept in one (Langworthy). 1900. p. 18.....	A1.9:114
Pendergast, W. W., address of, before Minnesota good roads convention, Jan., 1894. p. 7.....	A22.3:2
Pennell, Arthur. Hygrometric observations, utility of. 1899. p. 162.	A29.3:24
Pennsylvania:	
Anthracite coal in, production of. 1820-72. p. 36.....	A27.9:11
Barns of, description of (Watts). p. 289 .....	A1.1:864
Corn crop in, premium. 1870. p. 478.....	A27.9:8
Farm resources and products of. 1868. p. 17 .....	A27.9:6
Pleuro-pneumonia among cattle in (Gadsden). p. 47 .....	A1.1:881-2

# Index

	Classification no.
Pennsylvania—Continued	
Road system in (Hamilton). 1901. p. 25.....	A22.3:21
<i>See also</i> Lancaster — Lebanon — Philadelphia — Pittsburg.	
Pennsylvania Agricultural College, experiments with wheat at. 1873. p. 442.....	A27.9:11
Penny, Charles L. <i>See</i> , as joint author, Sanderson, E. Dwight.	
Pennywitt, Henry. Seasons, warm and cold, relative length of. 1901. p. 55.....	A29.6:29
Pens, disinfection of, by fire (Stiles). 1902. p. 15.....	A4.3:35
Pensacola, Fla., old thermometer record at (Abbe). 1901. p. 177..	A29.6:29
Pentaglucooses in feeding stuffs, notes on occurrence and quantitative estimation of (Stone). 1890. p. 125.....	A7.3:28
Pentosan, free crude fiber, determination of (Fraps). 1902. p. 51..	A7.3:67
Pentosans:	
Determination of, notes on (Fraps). 1901. p. 112.....	A7.3:62
Estimation of, phloroglucin method for (Lindsey and Holland). 1896. p. 53.....	A7.3:49
Pentstemon, notes on (Vasey). 1874. p. 438.....	A27.9:12
People, health of:	
1894. p. 201.....	A27.9:32
1895. p. 140.....	A27.9:33
1896. No. 136. p. 6.....	A27.9:34
People of Mars (Talman). 1900. p. 537.....	A29.6:28
People's banks. <i>See</i> Banks — Credit associations.	
Peppermint, oil of, account of. 1884. No. 9. p. 28.....	A27.9:22
<i>See also</i> Oil of peppermint.	
Peppers, American varieties of, list of (Tracy). 1902.....	A19.3:6
Perennial mycelium of fungus of blackberry rust (Newcombe). 1891. p. 106.....	A28.5:6
Perfumery, manufacture of. 1867. p. 251.....	A27.9:5
Perfumery farming, can it succeed in U. S.? (Steele). 1898. p. 377..	A1.10:898
Pergande, Theodore:	
Cotton or melon plant-louse, report on. 1895. p. 309.....	A9.7:7
Peach lecanium, report on. 1898. p. 26.....	A9.6:18
Plant-lice, two new species inhabiting witch-hazel and birch, life history of. 1902.....	A9.8:9
Plum plant-louse, report on. 1897. p. 52.....	A9.6:7
Southern grain louse. 1902. p. 7.....	A9.6:38
Thripidae, certain, observations on. 1895. p. 390.....	A9.7:7
<i>See also</i> , as joint author, Hubbard, Henry Guernsey.	
Pergande, Theodore, and Cockerell, Theodore Dru Alison. Coccidæ collected in Puerto Rico by A. Busch in 1899, list of. 1900. p. 92	A9.6:22
Periodic fever. <i>See</i> Splenic fever.	
Periodical cicada. <i>See</i> Cicada.	
Perishable goods, extremes of temperature safe for. 1900. p. 741..	A1.10:900
Perkins, G. H. Lachnosterna, notes on. 1892. p. 389.....	A9.7:4
Perkins, George A.:	
Address of, before national road conference, July, 1894. p. 53...	A22.3:10
Highways, State, in Massachusetts. 1894. p. 505.....	A1.10:894
Pernicious scale. <i>See</i> San José scale.	
Pernter, J. M. Hail, damage by, in spite of cannonading. 1901. p. 117.....	A29.6:29
Pernter's meteorological optics, note on (Abbe). 1902. p. 132.....	A29.6:30
Perognathus. <i>See</i> Pocket mice.	
Peronosporæ:	
Economic, for 1889 in New Jersey, some notes upon (Halsted). 1889. p. 201.....	A28.5:5
Grape vine, first results obtained from use of chloride of aluminum and proposal of new remedies against (Comes and Deperais). 1890. p. 94.....	A6.3:11
Milk of lime as remedy for, account of visit of Prof. Dehérain to Italian vineyards treated with. 1886. p. 77.....	A6.3:2
Overcome by hydrate of lime (Cerletti). 1885. p. 71.....	A6.3:2
Rain-fall and, report on (Halsted). 1889. p. 6.....	A28.5:5
Some, in herbarium of Vegetable Pathology Division (Swingle). 1891. p. 109.....	A28.5:7
Two new species of, description of (Waite). 1891. p. 105.....	A28.5:7



- Perrey, M. A. Grape mildew, destruction of, by sulphate of copper. 1886. p. 89 ..... A6.3:2
- Perry, Edward W.:  
 Cattle, pure-bred, number and value of, in United States. p. 339. A4.1:887-8  
 Cattle trade and allied industries of Michigan, Wisconsin, and Tennessee. p. 125 ..... A4.1:886  
 Cattle trade and dairy interests of Alabama, Georgia, Illinois, Indiana, and Ohio. p. 335 ..... A4.1:885  
 Live stock and meat traffic of Chicago. p. 245 ..... A4.1:884
- Persia, agriculture in. 1873. p. 507 ..... A27.9:11
- Persimmons:  
 Desirable qualities as a fruit (Smith and Beal). 1899. p. 9 ..... A1.9:107  
 New enemy of, note on. 1886. p. 34 ..... A9.3:12
- Peru, agriculture in. 1891. p. 354 ..... A27.9:29
- Peter, Alfred Meredith. Soil solution, potash in, direct determination. 1894. p. 65 ..... A7.3:43  
*See also*, as joint author, Scovell, Melville Amasa.
- Petermann, A. Agricultural experiment stations in Belgium. 1895. p. 550 ..... A10.6:5
- Peters, A. T.:  
 Paris Exposition, 1900, exhibit of U. S. experiment station veterinarians at. 1898. p. 22 ..... A4.3:22  
 Serum therapy in hog cholera. p. 196 ..... A4.1:897
- Peters, Edward T.:  
 Credit associations, cooperative, in certain European countries and their relation to agricultural interests. 1892 ..... A27.8:3  
 Foreign trade, recent features of our. 1894 ..... A27.8:8  
 Russian crops, estimates of. 1901 ..... A27.4:14  
 Rye, influence of, on price of wheat. 1900. p. 167 ..... A1.10:900
- Peters, Richard. Sheep husbandry in Georgia. 1878. p. 120 ..... A1.2:Sh3
- Peters, Theodore C. Agricultural survey of the South, report on. 1867. p. 192 ..... A27.9:5
- Peters, Thomas Willing. Plauen, Germany, cost of hauling farm products over wagon roads at. p. 8 ..... A22.4:27
- Peterson's method of meadow-culture. 1874. p. 433 ..... A27.9:12
- Petroleum:  
 Crude—  
 and other insecticides, further notes on (Felt). 1902. p. 49.. A9.6:31  
 as an insecticide (Wilcox). 1900. p. 15 ..... A1.9:114  
 notes on, and its effects upon plants and insects (Smith). 1901. p. 176 ..... A10.3:99  
 year's experience in (Smith). 1902. p. 118 ..... A10.3:115
- Exports of—  
 1863-64. No. 1. p. 33 ..... A27.9:3  
 1863-69. p. 47 ..... A27.9:8
- See also* Coal oil — Dendrolene — Raupenleim.
- Pezotettix, new species of (Bruner). 1894. p. 41 ..... A9.7:7
- Phanerogams:  
 North American, new species of, published in 1891, systematic and alphabetic index of (Clark). p. 151 ..... A6.5:1  
 same, published in 1892. p. 233 ..... A6.5:1  
 Western Texas, manual of, 1891-4 (Coulter) ..... A6.5:2
- Pharmacy and drug laws, compilation of, of States and Territories (Wedderburn). 1894 ..... A7.3:42
- Pheasants, introduced, special report on (Merriam). p. 484 ..... A1.1:888  
 Same. p. 484 ..... A5.1:888
- Phelps, C. S. Dairy-herd tests, cooperative, report on. 1901. p. 120. A10.3:99
- Phelps, C. S., and Voorhees, Edward Burnett. Irrigation in Connecticut and New Jersey, notes on. 1897 ..... A10.3:36
- Phenacomys. *See* Arvicolinæ.
- Phenologic or thermal constants (Ihne). 1895. p. 427 ..... A29.3:11<sup>2</sup>
- Phenological data (Smith). 1902. p. 196 ..... A29.3:31
- Phenological observations, instructions for taking (Bailey). 1896. p. 328 ..... A29.6:24
- Phenology in Ohio, note on, 1856-99 (Abbe). p. 156 ..... A29.6:28
- Phenomena, injurious, frequency of, note on (Abbe). 1899. p. 59. A29.6:27  
*See also* Optical phenomena.

# Index

	Classification no.
Philadelphia, Pa. <i>See</i> Franklin Kite Club.	
Philadelphia, Pa., Centennial Exposition, 1876:	
Address of Frederick Watts at, July 4, 1875. p. 440 .....	A27.9:13
Agriculture at. 1876. p. 248 .....	A27.9:14
Agriculture Department exhibit at—	
note on. p. 133 .....	A27.9:14
vegetable fibers in (Dodge). p. 497 .....	A1.1:879
Participation of Agriculture Department in (Saunders). 1884....	A1.2:P53
Relation of agriculture to. 1871. p. 288 .....	A1.1:871
<i>See also</i> Agriculture, hundred years progress in.	
Philadelphia, Pa., national agricultural congress, 5th, Sept. 12-14, 1876. p. 402 .....	A27.9:14
Philippine Islands:	
Agricultural investigations in (Evans). 1901. p. 503.....	A1.10:901
Animals from, order prohibiting landing of, at any port of U. S., or dependencies thereof, Dec. 13, 1901.....	A4.5:92
Baguios of, notes on (Abbe). 1899. p. 470 .....	A29.6:27
Brief account of. 1898. p. 672.....	A1.10:898
Climate in, notes on (Brewer). 1900. p. 102 .....	A29.6:28
Hurricanes of 1895 and 1896 in (Stetson). p. 101 .....	A29.6:28
Plant, products of, notes on (Hitchcock). 1899 .....	A6.4:17
Trade of (Hitchcock). 1898.....	A12.3:14
Weather Bureau, organization of, by U. S. Philippine Commission (Abbe). 1901. p. 372 .....	A29.6:29
Weather service, new, notes on (Abbe). 1901. p. 120 .....	A29.6:29
<i>See also</i> Baguio — Manila.	
Phillips, James P. Texas fever of cattle, or Southern cattle "distemper," ravages of. p. 142.....	A1.6:22
Phillips, William Fowke Ravenel:	
Address, as chairman of educational section, before second convention of Weather Bureau officials, held at Milwaukee, Wis., Aug. 27-29, 1901. p. 81.....	A29.3:31
Atmospheric temperatures during month of July, 1895. p. 253 ..	A29.6:23
Climate of Cuba—	
report on, with note on weather of Manila. 1898 .....	A29.3:22
report on. p. 307 .....	A29.1:898
Clothing and temperature, 1897. p. 200.....	A29.6:25
Meteorology—	
elementary, text-books and works of reference for students of. 1902. p. 408.....	A29.6:30
monthly list of papers bearing on, Jan., 1899-Dec., 1902.....	A29.6:
relation between public health and. 1895. p. 171.....	A29.6:23
Sunstroke in California and Arizona. 1896. p. 454.....	A29.6:24
Sunstroke weather of August, 1896. p. 409.....	A29.6:24
Temperature, rainfall, and humidity at San Juan, Porto Rico. 1899. p. 319 .....	A29.1:898
Weather Bureau library, monthly additions to, Dec., 1897-Mar., 1898 .....	A29.6:
Weather of Manila. 1899. p. 321.....	A29.1:898
<i>See also</i> , as editor, Weather Bureau officials, proceedings 2d convention of; as joint author, Calvert, Edgar B.	
Phinney, S. B. Cranberry culture. p. 131 .....	A1.1:863
Phipps, R. W.:	
Forestry in Ontario, address on. 1884. p. 43 .....	A1.7:5
Forests and their management in other countries. 1883. p. 19..	A1.7:1
Phloroglucin method for estimation of pentosans (Lindsey and Holland). 1896. p. 53.....	A7.3:49
Phoenix, Ariz., leonids seen at (Landis). 1901. p. 509.....	A29.6:29
Phosphate acid, insoluble, paper on. 1891. p. 106 .....	A7.3:31
Phosphate of lime, mineral. 1867. p. 256 .....	A27.9:5
Phosphates:	
Action of oxalic acid upon (Kastle and others). 1894. p. 53 ...	A7.3:43
As fertilizers. 1897. p. 12 .....	A1.9:56
Concentrated, notes on analysis of (Stillwell and Gladding). 1893. p. 18.....	A7.3:38
Determinations of loss on heating samples of, 1892 (Huston). p. 47 .....	A7.3:35

		Index
		Classification no.
Phosphates—Continued		
Iron and alumina in, determination of, method of.	1897. p. 47.	A7.3:51
Mineral, as fertilizers (Wiley).	1894. p. 177.	A1.10:894
Native, containing iron and aluminum, analysis of, proposed method for (Wilkinson).	1891. p. 107.	A7.3:31
Russian mineral (Yermoloff).	1873. p. 22.	A27.9:11
<i>See also</i> Mineral phosphates.		
Phosphatic slag, basic, mechanical analysis of (Wiley).	1896. p. 78.	A7.3:49
Phosphomolybdate. <i>See</i> Ammonium phosphomolybdate.		
Phosphoric acid:		
Additional notes on (Meng).	1892. p. 27.	A7.3:35
Available—		
determination of, comparison of Wagner's and present Association method for (Frear and McDonnell).	1886. p. 26.	A7.3:12
in fertilizers containing cotton-seed meal, determination of (Dancy).	1890. p. 161.	A7.3:28
Citrate-insoluble, comparison of results by old and new methods for (Kilgore and Williams).	1894. p. 108.	A7.3:43
Citrate-soluble, determination of (Ross).	1893. p. 16.	A7.3:38
Citrate soluble and insoluble, as determined by different methods (Solberg).	1895. p. 85.	A7.3:47
Determination of—		
by molybdate method (Garrigues).	1894. p. 105.	A7.3:43
comparison of official and nitric-acid methods for (Richards).	1886. p. 24.	A7.3:12
in soils (Snyder).	1895. p. 48.	A7.3:47
same (Goss).	1894. p. 58.	A7.3:43
same (Goss).	1895. p. 50.	A7.3:50
increased accuracy in (Wheeler).	1901. p. 44.	A7.3:62
nitrogen and, in commercial fertilizers in same weighed quantity of substance (De Roode).	1891. p. 104.	A7.3:31
use of ammonium nitrate in (Wheeler and Hartwell).	1892. p. 53.	A7.3:35
Discussion on estimation of (Gladding).	1896. p. 75.	A7.3:49
Insoluble, paper on (Morse).	1891. p. 106.	A7.3:31
Kilgore's modification of volumetric method of estimating (Williams).	1901. p. 55.	A7.3:62
Method of determining, in fertilizers.	1886. p. 43.	A7.3:12
Pemberton's method of determination, comparison of, with official method by Francis Bergami (Kilgore).	1894. p. 97.	A7.3:43
Rendered soluble by digestion with ammonium citrate at 65° C., amount of washing required to remove (Veitch).	1896. p. 73.	A7.3:49
Reverted—		
differences in determination of, by official method of analysis (Gibson).	1890. p. 166.	A7.3:28
remarks on (Warder).	1889. p. 184.	A7.3:24
Soil solvents for (Huston and Bartlett).	1896. p. 91.	A7.3:49
<i>See also</i> Ammonium citrate—Fertilizers—Guanos—Hawaiian soils.		
Phosphoric acid, committee on, report of, at Convention of Association of Official Agricultural Chemists:		
1886.	p. 16.	A7.3:12
1887.	p. 36.	A7.3:16
1888.	p. 26.	A7.3:19
1889.	p. 44.	A7.3:24
1890.	p. 153.	A7.3:28
1891.	p. 81.	A7.3:31
1892.	p. 23.	A7.3:35
1893.	p. 6.	A7.3:38
1894.	pp. 68, 86.	A7.3:43
1895.	p. 62.	A7.3:47
1896.	p. 60.	A7.3:49
1897.	p. 47.	A7.3:51
1898.	p. 36.	A7.3:56
1899.	p. 65.	A7.3:57
1900.	p. 35.	A7.3:62
1901.	p. 22.	A7.3:67

# Index

	Classification no.
Phosphorescent myriopods (Bruner). 1891. p. 319 .....	A9.7:3
Phosphorus, metabolism of, in human organism, experiments on (Sherman). 1902 .....	A10.3:121
Photographic apparatus for measuring altitudes attained by balloons (Caillaet). 1897. p. 443 .....	A29.6:25
Photographing lightning by daylight (Henry). 1895. p. 379 .....	A29.6:23
Photographs, micro-, of snow crystals, notes on (Abbe). 1900. p. 541 .....	A29.6:28
Photographs of meteorological phenomena, notes on (Abbe). 1898. p. 67 .....	A29.6:28
Photography in meteorology, notes on (Abbe). 1900. p. 159 .....	A29.6:28
<i>See also</i> Cloud photography — Tornado photographs.	
Phragmidium. <i>See</i> Puccinia and phragmidium.	
Phreatic waters in Nye County, Nevada (Nichols). 1891. p. 207 ..	A15.2:P94 <sup>1</sup>
<i>See also</i> Underground draining.	
Phylloxera:	
California (Hilgard). 1892. p. 155 .....	A1.8:20
Control of, by submersion. 1894. p. 315 .....	A9.7:6
Europe and America, report on (Planchon). 1874. p. 55 .....	A27.9:12
Experiments with (Glover). 1874. p. 428 .....	A27.9:12
Grape, notes on (Riley). p. 405 .....	A1.1:884
Notes on, from foreign sources (Glover). 1875. p. 40 .....	A27.9:13
Problem abroad as it appears to-day. 1890. p. 310 .....	A9.7:2
Remarks on (Glover). 1874. p. 43 .....	A27.9:12
Resin compounds on, experiments with, in 1890 (Koebele). 1891. p. 37 .....	A9.3:23
Stomata on <i>Carya alba</i> caused by, strange developments of (Owen). 1892. p. 327 .....	A9.7:4
Phylloxera vastatrix in Austria (Glover). 1875. p. 223 .....	A27.9:13
Physical geography, laboratory work in (Kimball). 1902. p. 313 ..	A29.6:30
Physical researches at Juvisy observatory, principally on solar rays (Flammarion). 1899. pp. 103, 203 .....	A10.6:10
Physics and meteorology:	
In universities, notes on (Abbe). 1899. p. 258 .....	A29.6:27
Notes on. 1902. p. 445 .....	A29.6:30
Physiological rôle of water in plants (Gain). 1897. p. 3 .....	A10.6:8
Physiology. <i>See</i> Vegetable physiology.	
Phytomyza affinis as cause of decay in clematis (Bos). 1893. p. 92.	A9.7:6
Phytophagic eurytominae. <i>See</i> Grass and grain joint-worm flies.	
Phytoptus distortions, erysipheae upon (Anderson and Kelsey). 1889. p. 209 .....	A28.5:5
Piedmont region, northwest gales of (Hawkins). 1899. p. 13 .....	A29.6:27
Pierce, Newton Barris:	
Almond disease caused by <i>Cercospora circumscissa</i> , remedies for. 1891. p. 232 .....	A28.5:7
Almond trees, disease of. 1891. p. 66 .....	A28.5:7
California vine disease, preliminary report of investigations. 1892.	A28.3:2
Grape diseases on Pacific coast. 1895 .....	A1.9:30
Olive culture in U. S. 1896. p. 371 .....	A1.10:896
Peach leaf curl, its nature and treatment. 1900 .....	A28.3:20
Prune rust. 1891. p. 354 .....	A28.5:7
Tuberculosis of olive. 1891. p. 148 .....	A28.5:6
Piercy, Joseph C.:	
Aerial observations. 1899. p. 119 .....	A29.3:24
Weather Bureau benefits to western Nebraska. 1899. p. 144 ..	A29.3:24
Pierre, S. Dak., ice at, breaking up of, notes on, 1846-89 (Abbe). p. 109 .....	A29.6:27
Pierson, William M. Grape-culture and wine-making in El Paso del Norte. 1873. p. 24 .....	A27.9:11
Pieters, Adrian John:	
Crimson clover seed, circular on .....	A6.4:18
Farmers' interest in good seed. 1900 .....	A1.9:111
Red clover seed—	
circular on. 1900 .....	A6.4:24
information to purchasers. 1901 .....	A1.9:123
Seed—	
of beardless brome grass. 1900 .....	A6.4:25

Pieters, Adrian John—Continued	
Seed—Continued	
production and seed saving. 1896. p. 207 .....	A1.10:896
selling, growing, and testing. 1899. p. 549 .....	A1.10:899
testing, methods of, and their relation to farm and garden. 1900. p. 55 .....	A10.3:76
testing at home. 1895. p. 175 .....	A1.10:895
Seeds, agricultural, where grown and how handled. 1901. p. 233 .....	A1.10:901
Sugar-beet seed, production and testing. 1902. p. 101 .....	A1.8:72
Pieters, Adrian John, and Brown, Edgar. Kentucky blue-grass seed, harvesting, curing, and cleaning. 1902 .....	A19.3:19
Pieters, Adrian John, and Charles, Vera K. Seed coats of certain species of genus Brassica. 1901 .....	A6.3:29
Pigeons:	
Animal parasites of, checklist of (Hassall). 1896 .....	A4.4:15
Fatal disease of, pathogenic bacillus of hog-cholera group asso- ciated with (Moore). 1895. p. 71 .....	A4.3:8
Piggery, model, plan of (Morris). p. 476 .....	A1.1:865
Pigs:	
Carcasses of, chemical composition of (Wiley and others). 1898.	A7.3:53
Corn, cowpeas, and wheat bran for fattening (Duggar). p. 496 ..	A4.1:898
Corn meal and wheat shorts, as food for (Plumb and Anderson). p. 463 .....	A4.1:899
Feeding in New Hampshire, experiments in (Burkett). p. 465 ..	A4.1:899
Feeding rice meal to. 1901. p. 24 .....	A1.9:144
Forage crops for—	
1897. p. 6 .....	A1.9:56
1898. p. 18 .....	A1.9:84
1901 (Langworthy). p. 25 .....	A1.9:124
Jerusalem artichokes for. 1899. p. 20 .....	A1.9:92
Lung and spleen of, nonmotile pathogenic bacillus closely re- sembling bacillus of hog cholera found in (Moore). 1893. p. 31 .....	A4.3:3
Pasturing in stubble fields. 1898. p. 20 .....	A1.9:79
Profitable crops for. 1901. p. 27 .....	A1.9:133
Slop for. 1901. p. 26 .....	A1.9:133
Subcutaneous tissues of, what becomes of hog-cholera and swine- plague bacteria injected into (Moore). 1894. p. 103 .....	A4.3:6
Wheat in sheaf, and chopped wheat for (French). p. 494 .....	A4.1:898
<i>See also Sows.</i>	
Pika, new species of, from Sierra Nevada Mountains, Cal., descrip- tion of (Merriam). 1889. p. 11 .....	A5.5:2
Pike, Nicolas. Leopard moth, ravages of, in Brooklyn. 1892. p. 317.	A9.7:4
Pikes Peak, hourly meteorological records at, November, 1892, to September, 1894, brief discussion of (Morrill). 1896. p. 215 ..	A29.1:896
Pimpla conquisitor, relations of, to Clisiocampa americana (Weed and Fiske). 1900. p. 33 .....	A9.6:26
Pimpla inquisitor, life history of (Weed). 1891. p. 275 .....	A9.7:3
Pinchot, Gifford:	
Forest lands, practical assistance to farmers, lumbermen, and others in handling. 1898 .....	A13.4:21
Forest problems, notes on some. 1898. p. 181 .....	A1.10:898
Forest students, prospective, suggestions to. 1902 .....	A13.4:23
Forestry, progress of, in United States. 1899. p. 293 .....	A1.10:899
Forestry Division, Agriculture Department, work of, for farmer. 1898. p. 297 .....	A1.10:898
Primer of forestry, pt. 1 .....	A13.3:24
Rainfall and charts of rainfall. 1902. p. 232 .....	A29.6:30
Tree planters, practical assistance to .....	A13.4:22
<i>See also, for reports as Chief, Forestry Division, 1898; as Forester, Forestry Division, 1899-1901; and as Forester, Forestry Bu- reau, 1902.</i>	
	A13.1:
Pindell, Lewis M.:	
River and flood service. 1899. p. 51 .....	A29.3:24
Weather symbols on rural free-delivery wagons. 1902. p. 208 ..	A29.3:31



# Index

	Classification no.
Pine:	
Insect enemies of, in Black Hills forest reserve (Hopkins). 1902.	A9.6:32
Insect injury to trees in Virginia and neighboring States (Chittenden). 1897. p. 67 .....	A9.6:7
Insects attacking trees, observations on certain (Felt). 1902. p. 103 .....	A9.6:37
Test pieces of, instructions for collection of, for timber investigations .....	A13.2:P65
<i>See also</i> Cuban pine — Loblolly pine — Long-leaf pine — Marsh or pond pine — Naval store industry — Short-leaf pine — Timber pine — White pine.	
Pine bark-beetle, destructive, damage to forests by (Hopkins). 1893. p. 187 .....	A9.7:5
Pine Bluff, Ark., working plan for forest lands near (Olmsted). 1902. ....	A13.3:32
Pine-leaf rust, new (Galloway). 1891. p. 44 .....	A28.5:7
Pineapple:	
Growing of (Rolfs). 1901. ....	A1.9:140
same, in southern Florida, note on (Abbe). 1900. p. 253. ....	A29.6:28
Industry of the U. S. (Webber). 1895. p. 269. ....	A1.10:895
Pineapple fiber, results of recent investigations relating to (Dodge). 1893. p. 44 .....	A11.5:5
Same, report of special agent, 1892 (Munroe). 1893. p. 46 .....	A11.5:5
Pinehurst, S. C., tea gardens of Dr. Charles U. Shepard, report on (Saunders). 1897. ....	A14.4:1
Pinehurst experimental tea garden, near Summerville, S. C., tea raising at (Shepard). p. 627. ....	A1.1:892
Pinheiro, A. P. Storms in South Atlantic. p. 204. ....	A29.3:11 <sup>1</sup>
Pinks, carnations and other, stigmonose, a disease of (Woods). 1900. ....	A28.3:19
Pioneer in agricultural science, Edmund Ruffin (Cutter). 1895. p. 493 .....	A1.10:895
Piper, C. V.:	
Melica and Stipa, notes on. 1900. p. 10. ....	A3.4:27
Orchard enemies in Pacific Northwest. 1902 .....	A1.9:153
Piper, Horace. Plants, hybridizing, cross-breeding, and degeneration of. p. 296 .....	A1.1:867
Pisciculture:	
Letter on. 1868. p. 361 .....	A27.9:6
With reference to American waters (Gill). p. 394 .....	A1.1:866
Pittier, H. Climatology of Costa Rica, monthly notes on, Jan., 1901—Oct., 1902 .....	A29.6:
Pittsburg, Pa., nutrition investigations in, 1894—1896 (Bevier) .....	A10.3:52
Plagiarism, note on (Abbe). 1901. p. 507. ....	A29.6:29
Plague. <i>See</i> Cattle plague — Hippelates — Pleuro-pneumonia.	
Plains:	
Calf-raising on (Rust). p. 177. ....	A4.1:886
Cultivation of. 1871. p. 25. ....	A27.9:9
Experimental tree-planting in (Keffer). 1898 .....	A13.3:18
Forest cultivation on, general discussion of (Blodget). p. 316 ...	A1.1:872
Grasses of eastern slope of Rocky Mountains and, catalogue of. p. 217 .....	A1.1:870
Tree planting and growing on (Furnas). 1883. p. 202. ....	A1.7:2
same, p. 37 .....	A1.8:28
<i>See also</i> Western plains.	
Planchon —. Phylloxera of Europe and America. 1874. p. 55. ....	A27.9:12
Planchon, J. E. Eucalyptus globulus from botanic, economic, and medical point of view, embracing its introduction, culture, and uses. 1875 .....	A1.8:9
Planchon, V. Soluble acids, estimation of, in butter fat. 1890. p. 112. ....	A7.3:24
Plant breeding:	
Hybrids and their utilization in (Swingle and Webber). 1897. p. 383 .....	A1.10:897
Progress of, in United States (Webber and Bessey). 1899. p. 465. ....	A1.10:898
same (Hays). 1901. p. 217 .....	A1.10:901
Report on (Coville). 1898 .....	A6.2:P69
same (Hays). 1901. ....	A28.3:29



Plant breeding—Continued	
<i>See also</i> Evans, Walter Harrison — Xenia.	
Plant-breeding station, Svalöf, Sweden (Fairchild). 1901. p. 814..	A10.6:13
Plant diseases:	
Abstracts of reports of agricultural experiment stations on, 1889-1902 .....	A10.6:
Fungicides or remedies for (Scribner). 1888 .....	A28.4:5
Possibility of lessening their spread by legislation (Galloway). 1897. p. 8 .....	A1.8:57
Proceedings of national convention for suppression of insect pests and (Galloway). 1897.....	A1.8:57
Progress in treatment of, in U. S. (Galloway). 1899. p. 191....	A1.10:899
Restriction of, legal enactments for; compilation of laws of U. S. and Canada (Smith). 1896 .....	A28.3:11
Study of fungi, especially in their relation to (Journal of Mycology) .....	A28.5:
Treatment of, experiments in, 1891—	
(Galloway and Fairchild.) pp. 89, 137.....	A28.5:6
(Galloway.) p. 12 .....	A28.5:7
same.....	A28.3:3
United States—	
1898. p. 652 .....	A1.10:898
1899. p. 750 .....	A1.10:899
1900. p. 729 .....	A1.10:900
1901 (Orton). p. 668 .....	A1.10:901
<i>See also</i> Almond disease — Apple scab — Bermuda lily disease — Black knot — Black spot — Blackberry rust — Blight — Blister mite — Cereal rusts — Club root — Cranberry gall fungus — Cranberry rot and scald — Gloeosporium — Gooseberry mildew — Grape mildew — Hollyhock disease — Hyacinth germ, Wakker's — Leaf blight — Leaf curl of peach trees — Leaf sickness of begonia and asplenium — Mosaic disease of tobacco — Peach blight — Peach-leaf curl — Peach rosette — Peach rot — Peach yellows — Pear blight — Pear-leaf blight — Pear scab — Pear-tree blight — Peronosporæ — Potato blight — Potato fungus — Potato rot — Potato scab — Powdery mildew — Prune rust — Ripe rot — Root fungus — Root knot — Root-rot disease — Rust mite — Smut — Sooty mold of orange — Sorghum blight — Sphærotheca phytophila — Spot disease — Spotting of peaches — Stigmonose — Sweet-potato black rot — Triblidium — Uredinæ — Ustilaginæ — White fir — Wilt disease.	
Plant faunæ, notes on (Cockerell). 1892. p. 117.....	A9.7:5
Plant food:	
Artificial, requirements of soils (Kilgore). 1902. p. 73.....	A10.3:115
Available, plan for cooperating in study of (Moore). 1902.....	A7.4:9
Plant growth, relation of lime and magnesia to, experimental study of (May). 1901. p. 37 .....	A19.3:1
Plant introduction:	
Commercial (Smith). 1900. p. 131 .....	A1.10:900
Systematic, its purposes and methods (Fairchild). 1898 .....	A13.3:21
<i>See also</i> Seed and plant introduction.	
Plant lice, two new species, inhabiting witch-hazel and birch, life history of (Pergande). 1901 .....	A9.8:9
<i>See also</i> Aphididæ — Aphis — Green-pea louse — Hop-plant louse — Pear-tree psylla — Phylloxera — Phylloxera vastatrix — Plum-plant louse.	
Plant life of Alabama (Mohr). 1901.....	A6.5:6
Plant physiology in relation to horticulture and agriculture (Woods). 1901. p. 127 .....	A10.3:99
Plant poisoning of stock in Montana (Wilcox). p. 91.....	A4.1:900
Plant registration, report of committee of Association of American Agricultural Colleges and Experiment Stations on. 1898. p. 76.	A10.3:49
Plant soil tests:	
Danger of drawing erroneous conclusions from (Wheeler). 1898. p. 60 .....	A7.3:56
Possibility of drawing erroneous conclusions from (Wheeler). 1899. p. 113 .....	A10.3:65

# Index

	Classification no.
Plant varieties, influence of environment in origination of (Webber). 1896. p. 89 .....	A1.10:896
Plantations, commercial, hardy catalpa in (Hall). 1902.....	A13.3:37
Planters' guide for cultivating and curing tobacco (Shelton Tobacco-Curing Co.). 1876.....	A1.8:10
Planting, southern, and northern farming (Watts). 1872. p. 207 ..	A27.9:10
Plants:	
American, regulations of foreign governments regarding importa- tion of (Howard). 1900.....	A9.5:41
Ash constituents of, their estimation and importance to agricul- tural chemistry and agriculture (Tollens). 1902. pp. 207, 305.	A10.6:13
Ash of, loss of sulphur in preparing (Fraps). 1901. p. 98 .....	A7.3:62
Bacteria parasitic on, four one-flagellate yellow, cultural charac- ters of (Smith). 1901.....	A28.3:28
Bacterial diseases of. 1898. p. 24 .....	A1.9:78
Cellulose and starch in animals and (Taylor). 1875. p. 316 ....	A27.9:13
same, 1876. p. 196.....	A27.9:14
Certain, of economic value as food for man and stock in Texas and New Mexico (Richardson). p. 282 .....	A1.1:887
Chemical composition of, influence of environment on (Wiley). 1901. p. 299.....	A1.10:901
Cold vs. warm water for, opinions of florists and gardeners. 1899. p. 13 .....	A1.9:92
Commercial growing of, under glass, progress of (Galloway). 1899. p. 575 .....	A1.10:899
Contributions from U. S. National Herbarium.....	A6.5:
Crude petroleum and its effects upon, note on (Smith). 1901. p. 176 .....	A10.3:99
Cultivated—	
frosts and freezes as affecting. 1895. p. 143.....	A1.10:895
principles and methods of breeding (Liebscher). 1897. p. 347.	A10.6:7
selection and its effects on (De Vilmorin). 1900. p. 3.....	A10.6:11
Cultivation of, relation of physical properties of soil to (Wollny). 1893. pp. 528, 627 .....	A10.6:4
Distribution from U. S. propagating garden, catalogue of (Saun- ders). 1862 .....	A1.8:2
Effect of naphthaline on (Taylor). 1883 .....	A18.2:N16
Exotic collection of Agriculture Department, descriptive catalogue of (Saunders). 1872 .....	A1.8:6
Feeding capacities of—	
cooperative experimenting as means of studying, etc., ferti- lizers and (Atwater). 1882. p. 27 .....	A1.8:22
experiments with fertilizers on fruits and vegetables to study variations due to action of fertilizers. 1891. ....	A10.4:19
Fiber experiments with, history of, etc. (Dodge). 1894.....	A11.5:6
Flowering of, dates of. 1864. No. 3. pp. 15, 25.....	A27.9:2
Formation of sodium carbonate, or black alkali, by (Cameron). 1902. p. 61 .....	A1.8:71
Free importation of. 1868. p. 62 .....	A27.9:6
Fungoid disease of (Taylor). p. 110 .....	A1.1:871
Fungous diseases of—	
experiments made in 1889 in treatment of (Galloway) .....	A6.3:11
outlines of certain, with remarks upon application of remedies (Scribner). p. 76 .....	A1.1:885
report on (Pearson). 1890. p. 41.....	A6.3:11
treatment for—	
1895. p. 587 .....	A1.10:895
1896. p. 625 .....	A1.10:896
1897. p. 673 .....	A1.10:897
Geographic distribution of, in North America (Merriam). p. 203.	A1.10:894
Geography of (Lippincott). p. 464 .....	A1.1:863
Germination and growth of, influence of alkali on. 1899. p. 8..	A1.9:97
Growth of, increasing vigor of. 1872. p. 143 .....	A27.9:10
Health of—	
in greenhouses (Galloway). 1895. p. 247 .....	A1.10:895
relation of nutrition to (Woods). 1901. p. 155.....	A1.10:901
House, cultivation of (Hall). p. 366.....	A1.1:863

**Plants—Continued**

Hybridizing, cross-breeding, and degeneration of (Piper). p. 296.	A1.1:867
Improvement of, by selection (Webber). 1898. p. 355.....	A1.10:898
Influence of illuminating gas upon (McMurtrie). 1875. p. 310..	A27.9:13
Insects and, some interrelations of (Riley). 1892. p. 358.....	A9.7:4
Leguminous—	
for green manuring and feeding (Allen). 1894 .....	A1.9:16
nitrogen, a germ fertilizer for. 1897. p. 19 .....	A1.9:65
soil inoculation for (May and Beal). 1901. p. 7 .....	A1.9:124
Low-growing, hydrocyanic-acid gas as insecticide on (Sanderson and Penny). 1900. p. 60 .....	A9.6:26
Matter in, passage of (McMurtrie). 1874. p. 222 .....	A27.9:12
Mildew and other fungous diseases of, apparatus for combating (Ferrouillat). 1888. p. 87 .....	A6.3:5
Mineral food of. 1870. p. 40 .....	A27.9:8
Nitrogen-free extract of (Tollens). 1897. p. 641.....	A10.6:8
Organic matter in, origin and formation of (Dehérain). 1898. p. 903.....	A10.6:9
Ornamental, insects injurious to, some (Chittenden). 1901 .....	A9.6:27
Pathology of, lines of investigation that might be undertaken by experiment stations (Galloway). 1897. p. 725 .....	A10.6:7
Propagation of (Corbett). 1902 .....	A1.9:157
<i>Pseudomonas hyacinthi</i> , <i>Ps. campestris</i> , <i>Ps. phaseoli</i> , and <i>Ps. stewarti</i> —four one-flagellate yellow bacteria parasitic on, cultural characters of (Smith). 1901 .....	A28.3:28
Resistance of certain, to black alkali (Cameron). 1902. p. 71..	A1.8:71
Santo Domingo. 1870. p. 283 .....	A27.9:8
Sap of, circulation of (Vasey). 1874. p. 151.....	A27.9:12
Scale insects found upon plants entering port of San Francisco, list of (Craw). 1896. p. 40.....	A9.8:4
Seedling, effect of certain components of alkali soils upon (Kearney and Cameron). 1902. p. 7 .....	A1.8:71
Testing varieties, report on (Hickman). 1891. p. 103.....	A10.5:3
Three new, descriptions of (Rose). 1893. p. 289 .....	A6.5:1
Under glass, treatment of mildews upon (Maynard). 1891. p. 16.	A28.5:6
United States, in Agriculture Department, catalogue of. 186-...	A1.2:P69
Used by—	
Indians of Mendocino County, California (Chesnut). 1902. p. 295 .....	A6.5:7
Klamath Indians of Oregon, notes on (Coville). 1897. p. 87..	A6.5:5
Useful—	
California (Hilgard). 1892. p. 137 .....	A1.8:20
certain species of Coleoptera that attack, notes on (Chittenden). 1897. p. 20 .....	A9.6:9
Varieties of, what our experiment stations have done in originating, by crossing, selecting, etc. (Halsted). 1901. p. 143..	A10.3:99
Variety testing, methods of work in (Green). 1891. p. 49.....	A10.5:3
Water as a factor in the growth of (Galloway and Woods). 1894. p. 165.....	A1.10:894
Water in, physical rôle of (Gain). 1897. p. 3 .....	A10.6:8
Wild, feeding to sheep (Nelson). p. 421.....	A4.1:898
same, p. 10 .....	A4.3:22
See also Agave—Agriculture—Alsike clover—Anhalonium—Apetalæ—Arborescent flora—Aroid plant—Asplenium—Berseem—Brassica—Burley tobacco—Cactus (flower)—Calamovilfa—California—Canada thistle—Canaigre—Cassava—Castor-oil bean—Castor-oil plant—Cellulose—Chicory—Chinese tea-plant—Chufa—Cigar-leaf tobacco—Cocklebur—Cocoa palm—Coffee—Conamelinacea—Condurango—Crepis occidentalis—Cucurbits—Dodders—Dyer's madder—Echinocactus—Economic plants—Faunæ—Ferns—Fertilizers—Fiber plants—Flat-pea—Flax—Flax-cotton—Flowers—Forage plants—Gamopetalæ—Giant beggar weed—Giant knotweed—Ginseng—Gramineæ—Gracilicula—Grasses and forage plants—Hemp—Hesperogenia—Hoffmanseggia—Hollyhocks—Hop plant—House plants—Indigo plant—Irish moss—Jouver—Jute—Knot-	

# Index

(Classification no.

## Plants—Continued

weed — Larkspur — Leibergia — Lichens — Licorice — Liverworts — Loco plant — Lophophora — Madder — Manila hemp — Marine plants — Monocotyledons — Moss — Mustard — Nut grass — Opium poppy — Opuntia — Osier culture — Osier-willow — Pachybasium — Palmer, Edward — Pasture plants — Pentstemon — Peppermint — Phanerogams — Poison oak — Poisonous plants — Polypetalæ — Pteridophytes — Pyrethrum — Quassia — Ramie — Rhubarb — Roseanthus — Sap — Seeds and plants — Shrubs — Soils — Sorghum — Starch — Sugar cane — Sugar-yielding plants — Tea — Teasel — Tobacco — Tradescantia — Trees — Trelease — Tres Marias Islands, Mexico — Umbelliferæ — Water hyacinth — Woody plants — Yucca — Yucca whipplei.	
Plaster and lime, use of. 1863. No. 6. p. 13.....	A27.9:1
Plat experimenting, methods of (Hays). 1896. p. 84.....	A10.3:30
Plat vs. pot or box experimentation (Thorne). 1890. p. 81.....	A10.5:3
Plateau region, barometric troughs of, report on (Hazen). 1895. p. 207.....	A29.6:23
Plats, equalizing irregularities of, caused by defective germination (Hunt). 1891. p. 111.....	A10.5:3
Plats in field experimentation, form, size, arrangement, and treatment of (Latta). 1896. p. 83.....	A10.3:30
Platte County, Nebr. See Great Eastern Canal.	
Platypsyllus:	
Egg and ultimate larva (Riley). 1890. p. 244.....	A9.7:2
Systematic relations of, as determined by larva (Riley). 1889. p. 300.....	A9.7:1
Plauen, Germany, cost of hauling farm products over wagon roads at (Peters). p. 8.....	A22.4:27
Playa Rica, Ecuador, climatological data from (Stapleton). 1898. p. 460.....	A29.6:26
Pleasants, Thomas S.:	
Agricultural production, diversity in. p. 247.....	A1.1:867
Wheat culture in Virginia. 1869. p. 231.....	A27.9:7
Pleuro-pneumonia, or lung plague of cattle:	
Article on—	
in National Live Stock Journal, 1880 (Law). p. 179.....	A1.6:22
review of. p. 143.....	A1.6:22
same, p. 436.....	A1.1:879
Contagious—	
1st report, 1879 (Lyman). p. 456.....	A1.1:879
same, p. 163.....	A1.6:22
2d report, 1880 (Lyman). p. 196.....	A1.6:34
3d report, 1880 (Lyman). p. 571.....	A1.1:880
same.....	A1.6:31
same, p. 268.....	A1.6:34
4th report, 1881 (Lyman). p. 30.....	A1.1:881-2
Final report, 1882 (Lyman). p. 352.....	A1.1:881-2
Delaware, outbreak of. p. 448.....	A4.1:884
Great Britain, Scotland, and Ireland (Reid). 1891. p. 401.....	A4.1:889-90
History of, in Richmond County, New York (Rose). p. 468.....	A4.1:884
Investigation of; inspection of stables. 1885. p. 553.....	A4.1:885
same. 1886. p. 374.....	A4.1:886
Investigations of—	
in Kansas (Devoe). p. 322.....	A4.1:895-6
in Maryland, District of Columbia, and Virginia (Rose). p. 51.....	A1.1:881-2
in New Jersey (Corlies). p. 46.....	A1.1:881-2
same (Miller). p. 45.....	A1.1:881-2
in New York (Hopkins). p. 43.....	A1.1:881-2
in Pennsylvania (Gadsden). p. 47.....	A1.1:881-2
report on—	
1884. p. 181.....	A1.1:884
same, p. 8.....	A4.1:884
same, p. 8.....	A4.2:An5
1885. p. 431.....	A1.1:885
same, p. 9.....	A4.1:885

	Index Classification no.
Pleuro-pneumonia, or lung plague of cattle—Continued	
Investigations of—Continued	
report on—Continued	
1886. p. 593 .....	A1.1:886
same, p. 9 .....	A4.1:886
1887. p. 458 .....	A1.1:887
same, p. 9 .....	A4.1:887
1888. p. 147 .....	A1.1:888
same, p. 29, 3d par. ....	A4.1:887-8
1889. p. 49 .....	A1.1:889
same, p. 7 .....	A4.1:889-90
1890. p. 75 .....	A1.1:890
same, p. 63 .....	A4.1:889-90
1891. p. 94 .....	A1.1:891
same, p. 22 .....	A4.1:891-2
1892. p. 85 .....	A1.1:892
same, p. 71 .....	A4.1:891-2
Legislation relative to, report on. 1882. p. 133 .....	A1.8:22
Letters relative to (Law). pp. 233, 237 .....	A1.6:12
New Jersey (Hunt). p. 297 .....	A4.1:884
Pathological anatomy and histology of respiratory organs in (Woodward). 1871. p. 64 .....	A1.2:C29 <sup>2</sup>
Preliminary report on (Gamgee). 1868. p. 432 .....	A27.9:6
Report on (Gamgee). 1869. p. 7 .....	A1.2:C29 <sup>1</sup>
same, p. 3 .....	A1.2:C29 <sup>2</sup>
Where and to what extent it exists. 1870. ....	A1.2:C29 <sup>6</sup>
<i>See also</i> Tuberculosis.	
Plover, killdeer, circular on. 1889 .....	A5.4:10
Plow:	
American, in Europe. 1868. p. 286 .....	A27.9:6
British improvement in. 1871. p. 67 .....	A27.9:9
Cleaning, mixture for. 1898. p. 677 .....	A1.10:898
Steam, in Louisiana. 1869. p. 225 .....	A27.9:7
Plowing, early, for wheat (May). 1900. p. 7 .....	A1.9:122
<i>See also</i> Steam plowing.	
Plows and plowing (Fleischmann). 1883. No. 64. p. 64 .....	A27.9:21
Plum curculio:	
Arsenical poisons for (Forbes). 1889. p. 3 .....	A9.7:2
Egg-laying record of (Quaintance and Smith). 1902. p. 105 .....	A9.6:37
Experiments in rearing, from plums and other fruits (Webster). p. 78 .....	A1.1:888
same, p. 78 .....	A9.1:888
Experiments with (Webster). 1890. p. 305 .....	A9.7:2
Notes on (Smith). 1891. p. 219 .....	A9.7:3
same (Gillette). 1891. p. 227 .....	A9.7:3
Report on (Riley and Howard). p. 57 .....	A1.1:888
same, p. 57 .....	A9.1:888
Plum gouger, notes on (Gillette). 1891. p. 227 .....	A9.7:3
Plum plant-louse, report on (Pergande). 1897. p. 52 .....	A9.6:7
Plum trees, black knot of (Peck). p. 175 .....	A1.1:872
Same (Taylor). 1874. p. 52 .....	A27.9:12
Plumandon, J. R. Hail shooting, general report on, presented to con- gress at Lyons; translated by Mrs. R. S. Hotze. 1902. p. 35.	A29.6:30
Plumb, Charles Sumner:	
Cereals, geographic distribution of, in North America. 1898. ....	A5.3:11
Silos and silage. 1895 .....	A1.9:32
Plumb, Charles Sumner, and Anderson, W. B. Corn meal and wheat shorts as food for pigs. p. 463 .....	A4.1:899
Plums:	
Cross-pollination of (Clark). 1899. p. 6 .....	A1.9:103
Culture of. 1902. p. 20 .....	A1.9:149
Food value of (Langworthy). 1899. p. 22 .....	A1.9:105
Native, how to fruit them; they are practically curculio proof (Wier). 1887. p. 39 .....	A9.3:14
New species of aphid injurious to, in Georgia, preliminary note on (Scott). 1902. p. 56 .....	A9.6:31
Plymouth rock, American breeds of fowls. 1. 1901 .....	A4.3:29

# Index

	Classification no.
Pneumonia. <i>See</i> Horses—Pleuro-pneumonia—Swine-plague.	
Poa, new species of, note on. 1901. p. 4 .....	A3.4:35
Poa fendleriana and its allies (Williams). 1899.....	A3.4:10
Pockels, F. Precipitation, theory of formation of, on mountain slopes. 1901. pp. 152, 306.....	A29.6:29
Pocket gophers:	
Geomyidæ family, exclusive of species Thomomys, monographic revision of (Merriam). 1895 .....	A5.5:8
Geomys, genus, from western Nebraska, description of (Merriam). 1890. p. 51 .....	A5.5:4
Mississippi Valley (Bailey). p. 185 .....	A1.1:892
same, p. 185 .....	A5.1:892
United States (Bailey). 1895.....	A5.3:5
<i>See also</i> Gophers.	
Pocket mice:	
North American, revision of (Merriam). 1889 .....	A5.5:1
Of the genus Perognathus, revision of (Osgood). 1900 .....	A5.5:18
Poëy, André. Agricultural meteorology. p. 97 .....	A1.1:869
Same, p. 113 .....	A1.1:870
Pogonip, notes on (Abbe). 1894. p. 76 .....	A29.6:22
Same (Abbe). 1900. p. 450.....	A29.6:28
Poison oak, (Cecidomyiid that lives on (Coquillett). 1895. p. 348..	A9.7:7
Poisoning by:	
Preserving in tin cans (Roos). 1892. p. 930.....	A7.3:13 <sup>i</sup>
Wild cherry leaves (Evans).. 1898. p. 16 .....	A1.9:103
Poisonous insects. <i>See</i> Centipedes—Scorpions—Tarantulas.	
Poisonous plants:	
Northern stock ranges (Chesnut). 1900. p. 305 .....	A1.10:900
Principal, of United States (Chesnut). 1898 .....	A6.3:20
Some common (Chesnut).. 1896. p. 137 .....	A1.10:896
Thirty, of United States (Chesnut). 1898.....	A1.9:86
<i>See also</i> Stock.	
Poisonous spider in Madagascar. 1890. p. 273 .....	A9.7:2
Poisons, destruction of sparrow by (Fisher). 1889. p. 174 .....	A5.3:1
Poisons and poisoning of cattle (Atkinson). p. 63.....	A4.2:C29 <sup>2</sup>
Polar expeditions:	
International, 1882-83 (Börger). 1895. p. 469 .....	A29.3:11 <sup>2</sup>
South, notes on (Kimball). 1901. p. 421 .....	A29.6:29
Politis, J. E. Sugar, quick estimation of, by one-tenth copper solution. 1890. p. 136.....	A7.3:28
Pollen, xenia, or immediate effect of, in maize (Webber). 1900....	A28.3:22
Pollination:	
Cross, relation to fruitfulness. 1897. p. 14 .....	A1.9:65
Pear flowers (Waite). 1894.....	A28.3:5
Pomaceous fruits (Waite). 1898. p. 167 .....	A1.10:898
Premature, injurious effects of, etc. (Hartley). 1902.....	A19.3:22
Yucca whipplei, in California (Coquillett). 1893. p. 311 .....	A9.7:5
Polsley, F. A. Road system, better, simple plan for. 1901. p. 98 ..	A22.3:21
Polypetalæ of western Texas, description of (Coulter). 1891. p. 6..	A6.5:2
Polysulphides, alkaline, use of, for grape mildew. 1885. p. 67.....	A6.3:2
Pomaceous fruits, pollination of (Waite). 1898. p. 167.....	A1.10:898
Pomological nomenclature, proposed code for (Craig). 1899. p. 130.	A10.3:65
<i>See also</i> Agricultural nomenclature.	
Pomological societies, list of:	
1870 .....	A1.8:4
1872 .....	A1.8:5
1876 .....	A1.8:12
<i>See also</i> American Pomological Society.	
Pomology Division, Agriculture Department:	A20.
Work of, for farmer (Brackett). 1897. p. 111.....	A1.10:897
Pomology in Wurtemberg (Schickler). 1870. p. 153.....	A27.9:8
Pond pine. <i>See</i> Marsh or pond pine.	
Ponta Delgata, Azores, storm at, Dec. 8, 1894 (Abbe). p. 508.....	A29.6:22
Pool, J. Forage plants of Arizona and New Mexico. 1888. p. 48..	A6.3:6
Poore, Ben: Perley. Agriculture of U. S., history of. p. 498.....	A1.1:866
Popenoe, E. A. Dissosteira longipennis, recent outbreak of, notes on. 1891. p. 41 .....	A9.7:4



	<b>Index</b>
	<b>Classification no.</b>
Poplar gonioctena, report on (Cook). 1891. p. 67 .....	A9.7:4
Poppelsdorf, Prussia, royal agricultural academy at, report on. 1885. p. 7 .....	A1.8:36
Poppy. <i>See</i> Opium poppy.	
Popular credit congress, Nîmes, France, 1895, notice on. p. 26.....	A27.9:33
Population. <i>See</i> Industrial population — Rural population.	
Porchinski, I. Tabanidæ (gadflies) and a very simple means of de- stroying them, translated by Peter Fireman. 1899. p. 25....	A9.6:20
Pork:	
American, Italian interdiction of. 1889. p. 129.....	A27.9:27
Consumption of, in Saxony. 1887. p. 591.....	A27.9:25
Examination of, for trichina, instructions for microscopists in. 1896 .....	A4.2:P42
Salted, of American origin, importation of, into France (Bouley). 1884. p. 186 .....	A4.3:30
Trichinæ in. 1866. p. 428.....	A27.9:4
Western trade. 1864. No. 6. p. 32 .....	A27.9:2
Pork-packing:	
Chicago, 1867. p. 372 .....	A27.9:5
Cincinnati, 1833-67. p. 52 .....	A27.9:5
Hogs and, in West (Emery). p. 198 .....	A1.1:863
Middle West, 1867-1868. p. 141.....	A27.9:6
same, 1868. p. 15 .....	A27.9:7
United States, 1878-87. p. 154 .....	A27.9:25
same, 1901. p. 646 .....	A4.1:901
West, 1864. No. 1, p. 34; No. 2, p. 22 .....	A27.9:2
Western, 1885. No. 17. p. 63.....	A27.9:23
Port au Prince, Hayti, meteorological observations at, monthly, notes on (Abbe). 1898. pp. 59, 103, 163, 212, 253, 406, 458....	A29.6:26
Port Carolina, South Australia, earthquakes, clouds, and gales at (Styles). 1902. p. 10 .....	A29.6:30
Porter, H. C. <i>See</i> , as joint author, Grindley, H. S.	
Porthetria dispar, introduction and spread of, in Massachusetts (Howard). 1897.....	A9.6:11
Portland, Maine, sugar-beet culture near (McMurtrie). 1879. p. 171.....	A1.6:28
Portland, Oreg., weather forecast district, monthly report of—	
Apr.-July, 1900 (Beals).....	A29.6:28
Sept., 1900 (Wollaber) .....	A29.6:28
Oct., 1900-Jan., 1901 (Beals) .....	A29.6:
Feb., 1901 (Wollaber) .....	A29.6:29
Mar.-July, 1901 (Beals).....	A29.6:29
Sept., 1901-Oct., 1902 (Beals) .....	A29.6:
Porto Rico:	
Agricultural investigation in (Evans). 1901. p. 503 .....	A1.10:901
Agricultural resources and capabilities of, report on, with special reference to establishment of an agricultural experiment sta- tion on the island (Knapp). 1901.....	A10.2:P83
Agriculture in (Stone). 1898. p. 505.....	A1.10:898
Animal industry of, notes on (Cook). p. 663.....	A4.1:899
Animals and animal products, trade in. p. 405.....	A4.1:899
Brief trip to, in January and February, 1899, notes on (Busck). 1900. p. 88 .....	A9.6:22
Cattle of (Steddom). p. 512 .....	A4.1:899
Changa or mole cricket in (Barrett). 1902.....	A10.12:2
Climate and crop service in, notes on (Abbe). 1899. p. 258 ....	A29.6:27
Climate of (Harrington). 1898. p. 437.....	A29.6:26
Coccidæ collected in, by A. Busck in 1899, list of (Pergande and Cockerell). 1900. p. 92.....	A9.6:22
Dairy industry and dairy products of (Pearson). p. 306 .....	A4.1:901
Farmers' institute work accomplished in (True). 1902. p. 33 ..	A10.3:120
Forest conditions of (Hill). 1899.....	A13.3:25
"Gran cultura" in, notes on (Abbe). 1899. p. 548.....	A29.6:27
Hurricane of 1899 (Paullin). p. 443.....	A29.6:28
Hurricanes of (Alexander). 1902 .....	A29.3:32
Industries of, value of climate and crop and storm-warning serv- ices of Weather Bureau to (Noyes). 1902. p. 60.....	A29.3:31

# Index

	Classification no.
Porto Rico—Continued	
Meteorological notes from (Geddings). 1900. p. 287.....	A29.6:28
Report on (Cline). 1901. p. 353.....	A29.6:29
Rubber cultivation in (Cook). 1900.....	A6.4:28
Trade of (Hitchcock). 1898.....	A12.3:13
Weights and measures in, notes on (Abbe). 1898. p. 567.....	A29.6:28
<i>See also</i> Hacienda Perla—San Juan.	
Porto Rico Agricultural Experiment Station:	
Annual report for 1901 (Gardner). 1902. p. 381.....	A10.1 <sup>2</sup> :901
Publications of .....	A10.12:
Portugal:	
Agriculture in. 1871. p. 141.....	A27.9:9
Icerya purchasi in, work against, with account of introduction from America of Novius cardinalis (Howard). 1898. p. 30..	A9.6:18.
Novius cardinalis in, introduction from America, account of (Le Cocq). 1898. p. 32.....	A9.6:18
Post, J. W. Railroads, track on wooden and metal ties, expenses of maintenance of. p. 25.....	A13.3:3
Postal regulations. 1898. p. 674.....	A1.10:898
Postal telegraph clock and weather bulletin, note on (Abbe). 1897. p. 351.....	A29.6:25
Poston, Charles D. Irrigation, report on. p. 193.....	A1.1:867
Pot culture, Wagner method of (Lindsey). 1897. p. 77.....	A10.6:7
Pot experiment to test field observations concerning soil deficiencies. (Hartwell). 1901. p. 73.....	A7.3:62
Pot experiments, vegetation house arranged for (Britton). 1901. p. 152.....	A10.3:99
Pot or box vs. plat experimentation (Thorne). 1891. p. 81.....	A10.5:3
Potash:	
As manure. 1870. p. 287.....	A27.9:8
Available, soil solvents for (Huston and Bartlett). 1896. p. 91..	A7.3:49
Bichromate of, does cream lose fat on keeping for long time with and without? (Winton). 1894. p. 192.....	A7.3:43
Determination of—	
in fertilizers, some sources of error in (Scovell and others). 1896. p. 42.....	A7.3:49
in soils (Snyder). 1895. p. 48.....	A7.3:47
same (Goss). 1895. p. 50.....	A7.3:47
results on official samples and descriptions of methods employed (Fassbender). 1894. p. 25.....	A7.3:43
sources of errors in (Terne). 1891. p. 150.....	A7.3:31
Direct determination of, in soil solution (Peter). 1894. p. 65...	A7.3:43
Estimation of, abstract of report on (committee of French Association of Sugar Chemists). p. 43.....	A7.3:16
Lindo-Gladding method of determining, report of use of sodium chloride in (Winton). 1891. p. 148.....	A7.3:31
Method for determining. 1886. p. 45.....	A7.3:12
Muriate of, harmful effects of. 1897. p. 15.....	A1.9:56
<i>See also</i> Hawaiian soils—Suint.	
Potash committee, Association of Official Agricultural Chemists, report of:	
1887. p. 42.....	A7.3:16
1888. p. 39.....	A7.3:19
1889. p. 79.....	A7.3:24
1890. p. 68.....	A7.3:28
1891. p. 144.....	A7.3:31
1892. p. 58.....	A7.3:35
1893. p. 52.....	A7.3:38
1894. p. 17.....	A7.3:43
1895. p. 14.....	A7.3:47
1896. p. 27.....	A7.3:49
1897. p. 29.....	A7.3:51
1898. p. 29.....	A7.3:56
1899. p. 58.....	A7.3:57
1900. p. 13.....	A7.3:62
1901. p. 17.....	A7.3:67
Potash and its function in agriculture (Wiley). 1896. p. 107.....	A1.10:896

	<b>Index</b>
	<b>Classification no.</b>
Potassium, iodide of, treatment of lumpy jaw with (Nörsgaard). p. 135.	A4.1:891-2
Same (Nörsgaard). 1893. p. 39 .....	A4.3:2
Potassium sulphide. <i>See</i> Nitrogen determination.	
Potato:	
Composition of different parts of, and loss of nutrients during process of boiling (Frisby and Bryant). 1897. p. 25 .....	A10.3:43
Crop—	
condition of, monthly notes on .....	A27.9:
statistics of, annual .....	A27.1:
Cultivation of, experiments in. 1873. p. 194 .....	A27.9:11
Culture of (Duggar). 1896 .....	A1.9:35
same, in Lake County, Ohio (Abbott). p. 295 .....	A1.1:865
Digestibility of (Snyder). 1897. p. 20 .....	A10.3:43
Diseased, how to use. 1865. No. 8. p. 27 .....	A27.9:3
Diseases of—	
and their treatment (Galloway). 1899 .....	A1.9:91
cause and cure of (Taylor). 1869. p. 64 .....	A27.9:7
some destructive, what they are and how to prevent them (Galloway). 1894 .....	A1.9:15
Ensiling, desirability of. p. 21 .....	A1.9:79
Experiments with (Scovel). 1874. p. 331 .....	A27.9:12
Extra-early, methods of securing (Smith). 1900. p. 6 .....	A1.9:114
Feeding value of (Smith). p. 511 .....	A4.1:898
Food for man. 1898. p. 11 .....	A1.9:84
Great Britain. 1894. p. 145 .....	A27.9:33
History, habits, diseases, etc. p. 225 .....	A1.1:868
Improved culture of. 1899. p. 9 .....	A1.9:92
same. 1902. p. 6 .....	A1.9:149
Large and small. 1866. p. 436 .....	A27.9:4
Loss of nutrients in boiling (Snyder). 1897. p. 7 .....	A10.3:43
same (Frisby and Bryant). 1897. p. 25 .....	A10.3:43
Production, imports, and exports of, 1885-94. p. 142 .....	A27.9:33
Raising in Tennessee (Callender). p. 657 .....	A1.1:880
Second-crop, for seed. 1899. p. 11 .....	A1.9:92
Starch from, manufacture of (Wiley). 1900 .....	A7.3:58
Starch in, importance of. 1897. p. 10 .....	A1.9:65
Sweet, as food for hogs (Duggar). p. 501 .....	A4.1:898
Value of, as food (Langworthy). 1900. p. 337 .....	A1.10:900
Yield of varieties of. 1868. p. 446 .....	A27.9:6
<i>See also</i> Crops, principal — Irish potato — Sweet potatoes.	
Potato beetle. <i>See</i> Colorado potato beetle.	
Potato blight and rot:	
Combating, report on (Bünzli). 1891. p. 78 .....	A28.5:6
Comparative test of fungicides in checking (Jones). 1893. p. 89 .....	A10.3:16
Microscopic investigations of (Taylor). 1872. p. 507 .....	A27.9:10
same (Taylor). 1873. p. 118 .....	A27.9:11
Treatment of. 1887 .....	A28.4:4
<i>See also</i> Potato rot.	
Potato bread for horses in Germany (Hughes). p. 530 .....	A4.1:899
Potato-bud weevil, report of (Chittenden). 1895. p. 350 .....	A9.7:7
Potato bug:	
Experiments with. 1868. p. 361 .....	A27.9:6
Remedy for. 1868. p. 32 .....	A27.9:6
<i>See also</i> Colorado potato beetle — Grosbeak, rose-breasted.	
Potato flour or farina (Macrae). p. 390 .....	A1.1:875
Potato fungus, microscopic observations of (Taylor):	
1873. p. 251 .....	A27.9:11
1874. p. 273 .....	A27.9:12
Potato rot injuries, experiment in preventing (Weed). 1889. p. 158 .....	A28.5:5
<i>See also</i> Potato blight and rot.	
Potato scab:	
Cause and means of prevention of. 1897. p. 20 .....	A1.9:56
Fungus of, remarks on (De Lagerheim). 1891. p. 103 .....	A28.5:7
Report on (Sorauer). 1889. p. 47 .....	A6.3:8
Potato-tuber moth, report of:	
1892. p. 239 .....	A9.7:4
1893 (Wight). p. 163 .....	A9.7:5

# Index

	Classification no.
Potomac Flats, grasses and fodder plants on (Ball). 1900 .....	A3.4:28
Potomac lands of Virginia for agricultural purposes. 1872. p. 16...	A27.9:10
Potomac River, phenological observations on (Very). 1900. p. 154.	A29.6:28
Potter, C. S. Wool-growing, profits of. 1864. No. 1. p. 22 .....	A27.9:3
Potter, Isaac B. Address of, before national road conference July, 1894. p. 50 .....	A22.3:10
Poughkeepsie, N. Y., sphingidæ and Bombycidæ taken by electric lamps at, list of (Dyar). 1891. p. 322.....	A9.7:3
Poultry:	
Animal matter a necessity for. p. 16.....	A1.9:97
Bibliography of (Hawks). 1897.....	A17.3:18
Condimental and medicinal foods for. 1901. p. 22.....	A1.9:144
Dressed, in foreign cities (Ashby). p. 330.....	A4.1:899
Dressing and packing for shipment. 1901. p. 25.....	A1.9:144
Enumeration of. 1880-90. p. 113.....	A27.9:32
Foreign markets for. p. 321.....	A4.1:899
Great Britain (Halstead). p. 508.....	A4.1:906
Industry, condition of (Dodge). p. 305 .....	A4.1:891-2
Infectious diseases among, investigations concerning. 1895.....	A4.3:8
Markets of Paris (Ashby). p. 341.....	A4.1:899
Preparing for London markets (Lowe). p. 333 .....	A4.1:899
Raising—	
for market. p. 345 .....	A1.1:862
in Belgium (Lincoln). p. 506 .....	A4.1:900
in France. 1873. p. 365 .....	A27.9:11
on the farm (Salmon). 1901 .....	A1.9:141
same, p. 235 .....	A4.1:900
Report on (Heffron). p. 358.....	A1.1:862
Sale of, in New York. 1869. p. 302* .....	A27.9:7
Tapeworms of, present knowledge of (Stiles). 1896. p. 9.....	A4.3:12
same, bibliography (Hassall). 1896. p. 81 .....	A4.3:12
Young, gape disease of, in Kentucky (Garman). p. 504 .....	A4.1:898
<i>See also</i> Chickens—Farm animals.	
Poultry associations, list of:	
1898. p. 615 .....	A1.10:898
1899. p. 697 .....	A1.10:899
1900. p. 652 .....	A1.10:900
1901. p. 627 .....	A1.10:901
Powdery mildew, treatment of nursery stock for (Galloway). 1891..	A28.4:10
<i>See also</i> Grapes.	
Powell, E. P. Agriculture in rural schools. 1902. p. 109.....	A10.3:120
Powell, John Wesley, address of, before convention of National League for Good Roads, Washington. 1893. p. 17 .....	A10.3:14
Powers, W. A. <i>See</i> , as joint author, Hopkins, Cyril George.	
Prairie dog:	
Destruction of, directions for (Merriam) .....	A5.4:32
Great Plains (Merriam). 1901. p. 257 .....	A1.10:901
New, from Wyoming, description of (Merriam). 1890. p. 33 ...	A5.5:4
Prairie ground squirrels. <i>See</i> Squirrels.	
Prairie land, tile-horned prionus in, note on. 1886. p. 39.....	A9.3:12
Prairie pastures, worn-out native, renewing of (Williams) .....	A3.4:4
Prairie region:	
Forage conditions of (Smith). 1895. p. 309.....	A1.10:895
Timothy in (Williams). 1896. p. 147 .....	A1.10:896
Prairie skies, note on (Abbe). 1898. p. 217.....	A29.6:26
Prairies:	
Sheep on (Grinnell). p. 300.....	A1.1:862
Timber on (Edwards). p. 495.....	A1.1:862
Trees in, note on. 1866. p. 286 .....	A27.9:4
<i>See also</i> Destitute regions.	
Pratt, Zadock. Dairy farming, with some account of farm of the writer. p. 456 .....	A1.1:865
Preble, Edward A.:	
Biological investigation of (Keewatin) Hudson Bay region. 1902.	A5.5:22
Jumping mice of genus <i>Zapus</i> , revision of. 1899 .....	A5.5:15

\*By a misprint, this page number appears twice.

**Precipitation:**

Average annual, in United States, 1871-1901 (Henry) p. 207.....	A29.6:30
Boston, Mass., Chicago, Ill., Dodge City, Kans., Jupiter, Fla., St. Louis, Mo., and San Francisco, Calif., 1889-91. p. 108....	A29.6:20
Cycles of (Murdoch). 1902. p. 482 .....	A29.6:30
Daily, tables of, at special river and rainfall stations of U. S. Weather Bureau, for 1893, 1894, 1895. 1900.....	A29.2:P91 <sup>2</sup>
Depth of, corresponding to given weights, table showing. 1892..	A29.2:P91 <sup>2</sup>
Details of, at stations in Nebraska and South Dakota. 1894 .....	A29.2:P91 <sup>1</sup>
Excessive, in United States (Henry). 1897. p. 13 .....	A29.6:25
Homogeneity and uniformity of, at Weather Bureau stations, notes on (Abbe). 1897. p. 249.....	A29.6:25
Measurement of (Marvin) .....	A29.11:E
Monthly notes on, July, 1891-Oct., 1902 .....	A29.6
New York City, 1870-91 (Draper). p. 79 .....	A29.6:20
Normal, in region of Great Lakes (Henry). 1899. p. 151 .....	A29.6:27
Pacific Northwest, and possibility of high water in Columbia [river] from melting snow in mountains (Pague). 1899. p. 252.	A29.6:27
Relation of water level of Great Salt Lake to (Murdoch). 1901. p. 22 .....	A29.6:29
Theory of formation of, on mountain slopes (Pockels). 1901. pp. 152, 306 .....	A29.6:29
True amount of, determination of, and its bearing on theories of forest influences (Abbe). 1893. p. 175 .....	A13.3:7
Washington, D. C., 1874-91. p. 79 .....	A29.6:20
<i>See also</i> Atmospheric precipitation—Climatic charts—Clima- tology.	
Predaceous insects. <i>See</i> Insects.	
Preserved meats, adulterations of (Bigelow and others). 1902. p. 375.	A7.3:13 <sup>10</sup>
<b>Press:</b>	
Good roads and (Battey). 1902. p. 55.....	A22.3:22
Opinions of, concerning free distribution of seed by Agriculture Department .....	A1.2:S23 <sup>2</sup>
Relations of weather officials with, how promoted (Sims). 1899. p. 74 .....	A29.3:24
Work of, for good roads (Battey). 1901. p. 89 .....	A22.3:21
Press bulletins, Forestry Division, Agriculture Department .....	A13.6:
Pressey, H. A., and Myers, E. W. Hydrography of southern Appa- lachians. p. 123.....	A1.2:Ap4 <sup>2</sup>
Prevost, L. Silk culture in California, letter on. 1867. p. 285 ....	A27.9:5
Price, M. M. Vine disease in France. 1873. p. 172.....	A27.9:11
<b>Price, Overton W.:</b>	
Forestry, practical, in southern Appalachians. p. 357.....	A1.10:900
Lumbering in southern Appalachians now and under Govern- ment ownership and supervision. p. 61.....	A1.2:Ap4 <sup>2</sup>
Price, R. H. Peaches, classification of varieties of. 1898. p. 82 ...	A10.3:49
Price lists of publications of Agriculture Department .....	A21.8:
<b>Prillieux, Edouard Ernest:</b>	
Aiguillon, France, black-rot of grape vine, treatment of, experi- ments at, in 1888. p. 49.....	A6.3:10
Grape mildew, treatment of, in Médoc, report of minister of agri- culture on. 1886. p. 83 .....	A6.3:2
Prince Edward area, Virginia, soil survey of (Mooney and Caine). p. 259 .....	A26.5:901 <sup>1</sup>
Prince George County, Md., soil survey of (Bonsteel and party). p. 173 .....	A26.5:901 <sup>1</sup>
Pringle, C. G. <i>See</i> , as collector, Coulter, John M., and Rose, Joseph Nelson.	
Printing, Solandi [sun]. [Halsted.] 1894. p. 93.....	A10.3:20
Printing office, Agriculture Department, report of foreman (Skin- ner.) 1894. p. 185.....	A1.1:894
Privet web-worm, report on. 1888. p. 22.....	A9.7:1
Probert, John T., short biography of. 1902. p. 450 .....	A29.6:30
Proconia undata in injurious numbers, note on. 1886. p. 42.....	A9.3:12
<b>Proctor, Frank W.:</b>	
Atmospheric rolls, horizontal, report on. 1896. p. 367 .....	A29.6:24
Wind nomenclature, report on. 1897. p. 54.....	A29.6:25



# Index

Classification no.

## Produce:

- Exports and prices of, 1864. No. 3, p. 6; No. 4, p. 8; No. 5, p. 33; No. 6, p. 32..... A27.9:2
- same, 1865. No. 1, p. 36; No. 2, p. 33..... A27.9:3
- Prices of, in Great Britain, 1860-64. No. 6. p. 34..... A27.9:2
- Statistics of United Kingdom. 1893. p. 210..... A27.9:31
- See also* Farm products.
- Produce brokers, farmers as, tax on. 1870. p. 77..... A27.9:8
- Pronuba, maxillary tentacles of (Smith). 1893. p. 161..... A9.7:5
- Pronuba pollination, notes on (Riley). 1889. p. 367..... A9.7:1
- Propagating garden. *See* Garden, United States propagating.
- Property, loss of, by lightning (Henry). 1899. p. 45..... A29.3:27
- Property and Stationery Division, Agriculture Department, report of Chief of (Hall). 1894. p. 209..... A1.1:894
- Proteid matters, separation of flesh bases from, by means of chlorin and bromin (Wiley). 1898. p. 27..... A7.3:54
- Proteids, nitrogen of, and that of simpler amids or amido-acids, investigation of analytical methods for distinguishing between (Mallet). 1898..... A7.3:54
- Protein, effect of rations. 1897. p. 4..... A1.9:56
- Protoparce carolina, life history of (Alwood). 1898. p. 72..... A9.6:17
- Protozoa, infectious disease, entero-hepatitis, among turkeys, caused by (Smith). 1895. p. 7..... A4.3:8
- Proverbs, weather, notes on (Abbe). 1896. p. 374..... A29.6:24
- Providence, R. I., research at, on atmospheric radiation (Very). 1900..... A29.5:G
- Provisions, exports of, 1856-62. No. 5, p. 7..... A27.9:1
- Prune rust, report on (Pierce). 1891. p. 354..... A28.5:7
- Prunes:
  - Culture of, in Pacific northwest (Lake). p. 41..... A20.1:894
  - same, reprinted..... A20.4:2
  - Food value of (Langworthy). 1899. p. 22..... A1.9:105
- Prunes and prune culture in western Europe, with special reference to existing conditions in Pacific northwest (Lake). 1901. A20.3:10
- Pruning. *See* Trees — Woody plants.
- Prussia:
  - Agricultural expositions in, results of. 1871. p. 456..... A27.9:10
  - Agricultural production in. 1869. p. 149..... A27.9:7
  - Agriculture in, 1867. p. 41..... A27.9:6
  - American corn in. 1868. p. 462..... A27.9:6
  - Crops of. 1866. p. 387..... A27.9:4
  - Game laws of. 1871. p. 205..... A27.9:9
  - Harvest in provinces of, 1853-62. No. 2. p. 11..... A27.9:2
  - Meteorological Institute of, work of, notes on (Abbe). 1901. p. 70..... A29.6:29
  - Railways, methods of impregnation of railway ties as practiced for (Fernow). 1894. p. 286..... A13.3:9
  - See also* Geisenheim-on-the-Rhine — Poppelsdorf.
- Pseudococcus. *See* Maple pseudococcus.
- Pseudomanas hyacinthi, Ps. campestris, Ps. phaseoli, and Ps. stewarti—four one-flagellate yellow bacteria parasitic on plants, cultural characters of (Smith). 1901..... A28.3:28
- See also* Wakker's hyacinth germ.
- Psychrometric tables, note on (Abbe). 1900. p. 449..... A29.6:28
- Psylla. *See* Pear-tree psylla.
- Pteridophyta of western Texas, descriptions of (Underwood). 1894. p. 557..... A6.5:2
- Pteridophytes, North American, new species of, published in 1891, systematic and alphabetic index of (Clark). p. 151..... A6.5:1
- Same, published in 1892. p. 233..... A6.5:1
- Pteridophytes of western Texas, manual of, 1891-4. (Coulter)..... A6.5:2
- Public and weather forecaster (Watts). 1902. p. 142..... A29.3:31
- Public and weather forecasts (Boyer). 1902. p. 151..... A29.3:31
- Public domain:
  - Disposition of, etc. 1896. p. 558..... A1.10:896
  - Extent of, report of. p. 454..... A1.1:868
  - Report on (West). 1898. p. 325..... A1.10:898



	<b>Index</b> Classification no.
Public domain—Continued	
Timber or forests on, legislation for preservation of (Egleston). 1888. p. 212 .....	A13.3:2
Public health:	
Relation of bovine tuberculosis to (Salmon). 1901.....	A4.3:33
Spraying fruits in its relation to, special consideration of. 1892..	A1.9:7
Public improvement, citizen's duty to (Moses). 1902. p. 36.....	A22.3:23
Public institutions, dietaries in (Atwater). 1901. p. 393 .....	A1.10:901
Public lands. <i>See</i> Lands—Public domain.	
Public Road Inquiries Office, Agriculture Department (formerly Office of Road Inquiry) .....	A22.
Public roads. <i>See</i> Roads.	
Public schools, meteorology in, how much should be attempted, methods of teaching (Chaffee). 1902. p. 85.....	A29.3:31
Publications Division, Agriculture Department (formerly Division of Records and Editing):	A21.
Work of, for farmer (Hill). 1897. p. 204.....	A1.10:897
Puccinia, new species of, descriptions of (Tracy). 1891. p. 281 .....	A28.5:7
Puccinia and phragmidium, relationship of (De Lagerheim). 1891. p. 111 .....	A28.5:6
Puerto Rico. <i>See</i> Porto Rico.	
Pullen, Isaac. Peach, propagation, cultivation, varieties, etc. p. 191.	A1.1:865
Pulvinaria acericola (W. & R.) and P. innumerabilis rathv. (Howard). 1898. p. 57.....	A9.6:17
Pulvinarias, two most abundant on maple (Howard). 1900. p. 7..	A9.6:22
Pump, spraying without (Aldrich):	
1894. p. 114 .....	A9.7:7
1895. p. 28 .....	A9.6:2
Punctistriga. <i>See</i> Artace punctistriga.	
Punjab, India. Cotton crop of. 1889. p. 163 .....	A27.9:28
Pupation, methods of, among Chalcididae (Howard). 1891. p. 193.	A9.7:4
Purdue University, Lafayette, Ind.:	
Agricultural building (new) at. 1901. p. 612.....	A10.6:13
Dietary studies at (Stone) .....	A10.3:32
same, comments on (Atwater and Woods). p. 23.....	A10.3:32
Pure-food law, working of a (Beal). 1900. p. 23.....	A1.9:122
Pure-food laws of European countries affecting American exports (Bigelow). 1901 .....	A7.3:61
Purslane:	
Flea-beetle living on (Chittenden). 1898. p. 83.....	A9.6:18
Value as a food (Langworthy). 1900. p. 22.....	A1.9:119
Purslane caterpillar, report on. 1888. p. 104 .....	A9.7:1
Purssell, B. M. Signals, Weather Bureau. 1892. p. 47.....	A29.3:7
Putullo, Andrew. Road problem. 1901. p. 84.....	A22.3:21
Pyralid, osage orange, report of (Murtfeldt). 1893. p. 155 .....	A9.7:5
Pyralidae, descriptions of, from Death Valley (Fernald). 1894. p. 255 .....	A9.7:6
Pyralidina of Death Valley expedition. 1894. p. 254.....	A9.7:6
Pyrenomycetes, history of development of, contributions to (Von Tavel). 1889. pp. 53, 113, 181.....	A28.5:5
Pyrethrum:	
Experiments with—	
Kirkwood, Mo. (Murtfeldt). p. 85 .....	A1.1:881-2
same, p. 85 .....	A9.1:882
report on. 1883. p. 16 .....	A9.3:3
Its use as an insecticide, report on. p. 76 .....	A9.1:882
Kerosene emulsion and (Riley). 1891. p. 32 .....	A9.7:4
Pyrheliometer, Angström's, examination of (Marvin). 1901. p. 454.	A29.6:29
Pyrophosphoric acid. <i>See</i> Cotton-seed meal.	
Quaintance, A. L.:	
Aleurodidæ, American, contributions toward a monograph of. 1900. p. 9 .....	A9.8:8
Cicada, periodical, feeding habits of adults of. 1902. p. 90.....	A9.6:37
Diabrotica 12-punctata oliv., observations on. 1900. p. 35.....	A9.6:26
Insects of year in Georgia. 1899. p. 56 .....	A9.6:20
San Jose scale, experiments with lime, salt, and sulphur wash against, in Maryland. 1902. p. 37.....	A9.6:37

# Index

	Classification no.
Quaintance, A. L., and Smith, Ralph I. Egg-laying record of plum curculio. 1902. p. 105 .....	A9.6:37
Quarantine. <i>See also</i> Cattle quarantine — South America.	
Quarantine regulations, orders, etc.....	A4.5:
<i>See also</i> Cattle orders.	
Quarantine stations, imports of animals at., 1897. p. 250 .....	A4.1:897
Quassia and other hop substitutes in beer, improved method of detecting (Allen). 1887. p. 376 .....	A7.3:13 <sup>3</sup>
Queen Charlotte Islands, British Columbia, natural history of (Osgood). 1901. p. 7.....	A5.5:21
<i>See also</i> Australasia.	
Question box at farmers' institutes (Amoss). 1902. p. 49 .....	A10.3:110
Quince, aphids of (Sanderson). 1902. p. 123.....	A10.3:115
Rabbits:	
Hepatic coccidia of, <i>Eimeria stiedæ</i> correct name for (Stiles). p. 18.	A4.3:35
Immunity in, experiments on production of, with reference to hog cholera and swine-plague bacteria (Smith and Moore). 1894. p. 41 .....	A4.3:6
Rabies:	
Alleged, in Nebraska, investigation of (Gibbs). p. 188 .....	A4.1:897
Causes, frequency, and treatment (Salmon). 1900. p. 211.....	A1.10:900
same, p. 122 .....	A4.1:900
Disease in cattle not distinguishable from (Moore). 1896. p. 10..	A4.3:10
Districts affected with, movement of animals from, order concerning, Dec. 11, 1899.....	A4.5:48
Report of committee on public health of Medical Society of District of Columbia. 1900.....	A4.3:25
Washington, D. C. (Moore and Fish). p. 267 .....	A4.1:895-6
same (Salmon), 1900 .....	A4.4:30
<i>See also</i> Animals.	
Rabun County, Ga., cattle in part of, releasing from quarantine, 1898.	A4.5:21
Same, Aug. 1, 1899.....	A4.5:41
Radlkofer, L. Sapindaceæ, three new species of, from western Mexico and Lower California. 1893. p. 367.....	A6.5:1
Rafinesque (C. S.) on atmospheric dust, notes on (Abbe). 1900. p. 291 .....	A29.6:28
Rafter, George W. Rainfall and charts of rainfall. 1902. p. 230..	A29.6:30
Ragan, W. H.:	
Fruit growing, progress in. 1901. p. 673.....	A1.10:901
Home vineyard, with special reference to northern conditions. 1902.	A1.9:156
Raiffeisen loan associations of Germany. 1891. p. 414 .....	A27.9:29
Railroad companies, letter to, relative to exportation of diseased cattle. 1890.....	A1.2:R13
Railroad ties:	
Annual charges for (Fernow). 1887. p. 105.....	A13.3:1
Chestnut oak for, circular on (Colman). 1887.....	A13.4:4
Consumption of, in U. S. 1890. p. 41.....	A13.3:4
Impregnation of, methods as practiced for Prussian railways (Fernow). 1894. p. 286.....	A13.3:9
Metal—	
report on (Fernow). 1887. p. 108 .....	A13.3:1
substitution for wood in (Tratman). 1890. p. 53 .....	A13.3:4
use of (Tratman). 1894.....	A13.3:9
Metal track on railways as substitute for wooden (Tratman). 1889. p. 7 .....	A13.3:3
Structure, behavior, and causes of decay of, in roadbed (Dudley). 1887. p. 31 .....	A13.3:1
Timber used for, kinds and quantity of (Hough). 1884. p. 119.	A13.5:4
Treatment of, in England (Tratman). 1888. p. 49.....	A13.3:3
Railroads:	
Connection of, with forest fires (Egleston). 1887. p. 128.....	A13.3:1
Construction of—	
1889. p. 48 .....	A27.9:28
1890. p. 37 .....	A27.9:29
1891. p. 27 .....	A27.9:30
Consumption of forest supplies by, and practicable economy in their use. 1890. p. 13 .....	A13.3:4

# Index

Classification no.

## Railroads—Continued

Freight classification, changes in (Ward). 1900 .....	A27.4:12
Information furnished by, regarding roads, road materials, and freight rates in certain states west of Mississippi River. 1894. ....	A22.3:5
same, in certain states north of Ohio River. 1894 .....	A22.3:6
Land-grant and bond-aided, alphabetical list of, in U. S. 1902 ..	A13.2:R13 <sup>2</sup>
Metal track on, as substitute for wooden ties (Tratman). 1889. p. 7 .....	A13.3:3
Mexican, statement of. 1894. p. 355 .....	A27.9:32
Mileage of world. 1876. p. 500 .....	A27.9:14
Presidents of, circular letter to, requesting cooperation with Office of Road Inquiry, Agriculture Department .....	A22.4:5
Relation of—	
common roads to (Haupt). 1902. p. 61 .....	A22.3:22
to agriculture (Richards). 1902. p. 107 .....	A10.3:120
to forest supplies and forestry (Kern). 1887. p. 11 .....	A13.3:1
to timber resources of U. S. (Tratman). 1889. p. 68 .....	A13.3:3
Roads and, speech on (Spencer). 1902. p. 41 .....	A22.3:25
Sleepers on, cast-iron versus steel. p. 312 .....	A13.3:9
Track, metal of, patents relating to (Tratman)—	
1889. p. 36 .....	A13.3:3
1890. p. 326 .....	A13.3:4
1894. p. 292 .....	A13.3:9
Track on, wooden and metal ties, expense of maintenance of (Post). p. 25 .....	A13.3:3
Transportation services, changes in rates of charge for (Newcomb). ....	A27.8:15
Weather signals. 1883. No. 64. p. 18 .....	A27.9:21
Wool transportation, charges for. 1896 .....	A27.8:10
Railway Superintendents of Bridges and Buildings, American International Association of, report of committee of, on strength of bridge and trestle timbers. 1895. p. 41 .....	A13.3:12
Rain:	
Artificial, notes on (Abbe). 1900. p. 22 .....	A29.6:28
Fish in, note on (Abbe). 1901. p. 263 .....	A29.6:29
Hawaiian Islands, notes on (Abbe). 1898. p. 116 .....	A29.6:26
Local, extent of (Abbe). 1895. p. 382 .....	A29.6:23
Monsoon, forecasting (Abbe). 1895. p. 213 .....	A29.6:23
Popular queries about, with answers (Kimball). 1901. p. 422 ..	A29.6:29
Production of, by great fires, notes on (Abbe). 1896. p. 461 ...	A29.6:24
Radio-active, note on (Abbe). 1902. p. 313 .....	A29.6:30
Red, and dust storms, notes on (Abbe). 1901. p. 120 .....	A29.6:29
Sand, dust, and mud, notes on (Abbe). 1899. p. 158 .....	A29.6:27
Seasonal, in Colorado, note on (Abbe). 1900. p. 155 .....	A29.6:28
Sulphur, notes on (Abbe). 1898. p. 115 .....	A29.6:26
Theory of formation of, on mountain slopes (Pockels). 1901. pp. 152, 306 .....	A29.6:29
Trees as forecasters of (Abbe). 1902. p. 315 .....	A29.6:30
Worms, and angleworms, note on (Abbe). 1899. p. 474 .....	A29.6:27
<i>See also</i> Snow and rain — Sulphur rains.	
Rain and snow gage, Marvin's weighing (Carlisle). 1899. p. 131 ..	A29.3:24
Same, instruction for using .....	A29.11:E
Rain gages:	
For measurement of hail (Abbe). 1898. p. 210 .....	A29.6:25
Instructions for use of .....	A29.11:C
Readings, comparative, at Atlanta, Ga. (Henry). 1899. p. 543 ..	A29.6:27
Records of, reduction of (Jefferson). 1901. p. 499 .....	A29.6:29
Reliability of (Abbe). 1894. p. 25 .....	A29.6:22
Remarks on (Henry). 1901. p. 500 .....	A29.6:29
Wind and, notes on (Abbe). 1899. p. 464 .....	A29.6:27
Rain gushes in thunderstorms (Abbe). 1897. p. 303 .....	A29.6:25
Same (Abbe). 1898. p. 258 .....	A29.6:26
Rain-producing processes, some (Garriott). 1899. p. 67 .....	A29.3:24
Rain storm, great, of October, 1869. p. 378* .....	A27.9:7
Rainbow:	
High, note on (Abbe). 1898. p. 256 .....	A29.6:26
Lunar, notes on (Abbe). 1898. pp. 67, 364 .....	A29.6:26

\* By a misprint, this page number appears twice.

# Index

## Classification no.

### Raindrops:

Large, formation of, notes on (Abbe). 1900. p. 159 .....	A29.6:28
Size and rate of fall, note on (Abbe). 1897. p. 445 .....	A29.6:25
Studies in, notes on (Abbe). 1900. p. 158 .....	A29.6:28

### Rainfall:

Amoy, China, 1897-1902 (Fesler). p. 486.....	A29.6:30
Barometric pressure and (Abbe). 1895. p. 172 .....	A29.6:23
Catch of, effect of wind on (Abbe). 1899. p. 308 .....	A29.6:27
same (Symons). 1899. p. 454.....	A29.6:27
Causes of, with relation to surface conditions (Curtis). 1893. p. 187 .....	A13.3:7
Chagres River, upper (Abbot). 1900. p. 243.....	A29.6:28
Climate and, relation of, to prevalence of fungus diseases (Halsted). 1899. p. 126 .....	A10.3:65
Colon, Colombia, note on, 1893-95 (Abbe). p. 362.....	A29.6:26
Convectional currents causing (Kimball). 1900. p. 483 .....	A29.6:28
Crop season (Henry). 1897. p. 607.....	A1.10:897
Distribution of, over land (Herbertson). 1901. p. 67 .....	A29.6:29
England, 1841-63. No. 1. p. 42 .....	A27.9:2
Excessive, record of—	
1898-99. p. 300 .....	A29.1:900
1900. p. 281 .....	A29.1:901
1901. p. 268 .....	A29.1:902
Experimental, report of (Abbe). 1896. p. 373.....	A29.6:24
Firmeza, Cuba, 1888-98. (Monroe). p. 252.....	A29.6:26
Forest and, report on (Hazen). 1897. p. 395.....	A29.6:25
Forest clearing and cultivation, effects on (Fulton). 1899. p. 89.	A29.3:24
same (Salisbury). 1899. p. 91.....	A29.3:24
Forests—	
influences upon (McMurtrie). 1874. p. 432 .....	A27.9:12
same. 1876. p. 103 .....	A27.9:14
relation to, in West India islands (Hubbard). 1873. p. 117..	A27.9:11
Grazing and, notes on (Abbe). 1901. p. 176 .....	A29.6:29
Great Lakes, overflow and (Abbe). 1898. pp. 164, 215.....	A29.6:26
Great Salt Lake level and, relation between (Mackie). 1901. p. 57 .....	A29.6:29
Heavy—	
area of, in southern Appalachians (Hawkins). 1897. p. 442.	A29.6:25
in local storms, notes on (Abbe). 1900. p. 207 .....	A29.6:28
region of (Hawkins). 1895. p. 294 .....	A29.6:23
High, Weather Bureau stations, notes on (Abbe). 1899. p. 257.	A29.6:27
Hourly results from self-registers for recording (Abbe). 1897. p. 252 .....	A29.6:25
Idaho rivers and, notes on (Abbe). 1898. p. 473 .....	A29.6:27
Jamaica, notes on—	
May, 1870-98 (Abbe). p. 415 .....	A29.6:26
1899 (Abbe). p. 206.....	A29.6:28
1900 (Hall). p. 503 .....	A29.6:29
Leeward and Windward Islands (Jefferson). 1901. p. 56.....	A29.6:29
Leeward Islands (Alexander). 1901. p. 254.....	A29.6:29
Madras, India, and frequency of sun spots (Subha Rao). 1902. p. 438.....	A29.6:30
Masaya and Granada, Nicaragua (Henry). 1898. pp. 162, 305...	A29.6:26
Measurements on ships, notes on (Abbe). 1898. p. 313.....	A29.6:26
Mountains, relation to (Alexander). 1901. p. 6 .....	A29.6:29
New Haven, 1873-1900 (Davis). p. 261 .....	A29.6:30
Nicaragua, record of—	
1850-51. (Childs). p. 409 .....	A29.6:26
1876-93 (Henry). p. 305 .....	A29.6:26
1899 (Flint). p. 587.....	A29.6:27
Peronosporæ and, report on (Halsted). 1889. p. 6 .....	A28.5:5
Quantity of, corresponding to given depths (Henry). 1898. p. 408 .....	A29.6:26
Ratio of, to discharge of Chagres River, 1899 (Abbot). p. 541...	A29.6:27
Rivas, Nicaragua, 1880-98 (Flint). p. 304.....	A29.6:26
Saint Kitts, W. I. (Alexander). 1900. p. 487.....	A29.6:28
San Juan, Porto Rico, report on (Phillips). 1899. p. 319 .....	A29.1:898

**Rainfall—Continued**

Should weekly reports of, be telegraphed from voluntary stations? (Marbury). 1899. p. 108.....	A29.3:24
Snow and, of United States, to end of 1891 (Harrington) .....	A29.5:C
Temperature and, at Mersivan, Turkey (Abbe). 1897. p. 245 ..	A29.6:25
Texas, 1881-93 (Hanrick). p. 174.....	A29.6:22
same, extraordinary (Hazen). 1899. p. 249.....	A29.6:27
United States, report on (Henry). 1897. p. 317.....	A29.1:897
same, with annual, seasonal, and other charts (Henry). 1897.	A29.5:D
<i>See also California—Sulphur rains.</i>	
Rainfall and charts of rainfall. 1902. p. 205.....	A29.6:30
Rainfall chart, lines of equal time of water travel at Cairo, Ill. 1892.	A29.2:R13 <sup>1</sup>
Rainfall laws, deduced from twenty years' observations (Hinrichs). 1893 .....	A29.2:R13
Rainfall observers, special, instructions to. 1893.....	A29.12:R13
Same. 1902.....	A29.12:R52 <sup>3</sup>
Rainier, Mount, Washington. <i>Hesperogenia</i> , new genus of umbel- liferæ, from (Coulter). 1899. p. 203 .....	A6.5:5
Raisin grape, cultivation of, by irrigation (Eisen). 1891. p. 225...	A15.2:P94 <sup>1</sup>
Raisin making (Furnas). 1892. p. 117.....	A1.8:20
Raisins, muscatel, production of, in Malaga (Mark). 1875. p. 319..	A27.9:13
<b>Raleigh, N. C.:</b>	
Address at, on road improvement, Feb. 5, 1897 (Stone). p. 19 ..	A22.4:28
Soil survey from, to Newbern, N. C. (Smith). p. 187.....	A26.5:900 <sup>1</sup>
State fair, cattle exhibited at, order providing for return of non- infected. July 18, 1899 .....	A4.5:37
same. 1900 .....	A4.5:60
<b>Ramie, or "China grass":</b>	
American industry in, recent facts regarding (Dodge). 1893.....	A11.5:2
Botanical considerations of, in France. 1892. p. 97 .....	A27.8:1
same, 2d ed., p. 97.....	A11.5:1
Cultivation of, in United States, with statements concerning prac- tice in foreign countries, cost of cultivation and percentages of yield; the machine question, and preparation of fiber for man- ufacture (Dodge) .....	A11.5:7
Culture and manufacture of jute and, in United States (Lefranc). 1873 .....	A1.8:8
Culture of jute and. p. 261.....	A1.1:873
Culture in the South (Dodge). 1893. p. 164.....	A10.3:16
Experiments in raising, etc. p. 220.....	A1.1:867
Facts regarding, recent (Dodge)—	
1891. p. 183 .....	A27.9:29
1894. p. 443 .....	A1.10:894
Importance of (Dodge). p. 347.....	A1.1:865
Letters concerning—	
1869. p. 137 .....	A27.9:7
1870. p. 78 .....	A27.9:8
Machine trials—	
at New Orleans. 1892. p. 347 .....	A27.9:30
in Paris, in 1889 (Dodge). p. 32.....	A27.8:1
same, 2d ed., p. 32.....	A11.5:1
Manufacture of, status of. 1869. p. 369*.....	A27.9:7
Notes on. 1867. p. 149 .....	A27.9:5
Question, report on (Dodge). 1892. p. 75.....	A27.8:1
same, 2d ed., p. 75 .....	A11.5:1
Rand, William S. Liquid manuring, experiments in. p. 184 .....	A1.1:867
Randall, Henry S. Sheep, selection, treatment, and diseases of, in United States. p. 229.....	A1.1:863
Randolph, Fred. J., and Francis, Fred. L. Thomas Jefferson as meteorologist. 1896. p. 456.....	A29.6:23
Randolph, L. S. Mechanical drawing, course of instruction in. 1901. p. 184 .....	A10.3:99
<b>Rane, F. William:</b>	
Agricultural experiment station work, progress of variety testing in. 1901. p. 141.....	A10.3:99

\* By a misprint, this page number appears twice.



# Index

	Classification no.
Rane, F. William—Continued	
Horticulturists at agricultural experiment stations, some unde- fined duties and methods of. 1896. p. 76 .....	A10.3:30
Muskmelons, fertilization of, by insects, notes on. 1898. p. 75 ..	A9.6:17
Range grass and forage plant experiments at Highmore, S. Dak. (Scribner), 1899 .....	A3.4:21
Same (Scribner). 1901 .....	A3.4:33
Range improvement:	
Administration and (Forbes). 1902. p. 85 .....	A10.3:115
Arizona (Griffiths). 1901 .....	A19.3:4
Central Texas, experiments in (Bentley). 1902 .....	A19.3:13
Experiments in (Smith). 1898 .....	A3.4:8
Forage crops, and progress of experiments in, at Abilene, Tex. (Bentley). 1899 .....	A3.4:23
Range industry, importance of (Taylor). p. 293 .....	A4.1:885
<i>See also</i> Stock ranges.	
Ransom, L. A. Bermuda grass for hay. p. 87 .....	A1.1:883
Same. No. 61. p. 27 .....	A27.9:21
Rape plant:	
As a forage plant (Williams). 1899 .....	A3.4:12
History, culture, and uses (Shaw). 1893 .....	A1.9:11
Importance of, for feeding purposes. 1898. p. 9 .....	A1.9:78
Rapley, E. E. Louisiana, southwestern, soils and products of, in- cluding parishes of Saint Landry, Lafayette, Vermilion, Saint Martins, Iberia, and Saint Mary's. 1884 .....	A1.8:35
Rathbun, Mary Jane. Tres Marias Islands, Mexico, crustacea of, 1899. p. 73 .....	A5.5:14
Rathvon, S. S. Entomology and its relation to vegetable produc- tions of soil, with reference to destructive and beneficial in- sects. p. 372 .....	A1.1:862
Rathvon, S. V. Insects injurious to grape. 1868. p. 452 .....	A27.9:6
Rats and bandicoots, trypanosomiasis in. p. 155 .....	A4.1:901
<i>See also</i> Kangaroo rats.	
Raupenleim, report on (Smith). 1895. p. 31 .....	A9.6:2
Ravenel, H. W. Texas, fungi of. 1869. p. 169 .....	A1.2:C29 <sup>1</sup>
Same. p. 171 .....	A1.2:C29 <sup>2</sup>
Raw cotton, exports of, from United States, 1890-1895. p. 551 .....	A1.10:895
Same, 1890-1896. p. 596 .....	A1.10:896
Raw silk:	
Examination of (McMurtrie). 1883. p. 56 .....	A9.3:3
Tenacity, elasticity, and ductility of, notes on (Walker). 1889. p. 309 .....	A9.7:1
Raza Island, plants collected at, by Edward Palmer in 1890, list of (Vasey and Rose). 1890. p. 79 .....	A6.5:1
Read, M. C. Forests on headwaters of streams, preservation of. 1884. p. 27 .....	A1.7:5
Reaping machines, evolution of (Miller). 1902 .....	A10.3:103
Reasoner, P. W. Fruits, tropical and semitropical, of Florida and Gulf States. p. 7 .....	A20.3:1
Reciprocity and agricultural exports. 1892. p. 391 .....	A27.9:30
Reciprocity and French tariff treaties. 1892. p. 181 .....	A27.9:30
Reciprocity treaty, Canadian, note on. 1866. pp. 16, 144 .....	A27.9:4
Recording instruments. <i>See</i> Weather recording instruments.	
Records and Editing Division, now Publications Division, Agricul- ture Department .....	A21.
Records Division, Weather Bureau, tables for dividing by 672, 720, 744, 56, 60, 62 .....	A29.2:T11
Red and black scales, Australian enemies of. 1892. p. 41 .....	A9.7:5
Red ants, report on (Riley). 1889. p. 104 .....	A9.7:2
Red bug. <i>See</i> Cotton stainer.	
Red cedar:	
Notes on (Mohr). 1901 .....	A13.3:31
Two diseases of, caused by <i>Polyporus juniperinus</i> n. sp. and <i>Polyporus carneus</i> nees (Schrenk). 1900 .....	A28.3:21
Red clover seed:	
Circular on (Pieters). 1900 .....	A6.4:24
Information for purchasers (Pieters). 1901 .....	A1.9:123



	<b>Index</b>
	<b>Classification no.</b>
Red desert of Wyoming and its forage resources (Nelson). 1898....	A3.3:13
Red kafir corn. <i>See</i> Kafir corn.	
Red-legged flea-beetle, its injuries to orchard trees in Maryland and Virginia (Schwarz). 1893. p. 334 .....	A9.7:5
Red River Valley, soils in, temperature and moisture of, notes on, 1892-98 (Abbe). p. 477 .....	A29.6:27
Red scale:	
Australian enemies. 1892. p. 41.....	A9.7:5
California—	
hymenopterous parasites of (Howard). 1894. p. 227 .....	A9.7:6
various methods for destroying (Coquillett). 1890. p. 9.....	A9.3:22
Destruction of, use of hydrocyanic-acid gas for (Coquillett). 1890. p. 202 .....	A9.7:2
Experiments on (Koebele). p. 558.....	A1.1:886
Red spiders of U. S., report on (Banks). 1900. p. 65 .....	A9.8:8
Redden, Laura C. Orange and citron, culture of. p. 147 .....	A1.1:867
Redfield, John A. Cotton worms, destruction of, by birds. 1883. No. 65. p. 25.....	A27.9:21
Redfield and Espy period of meteorological advancement, 1830 to 1855 (Davis). 1895. p. 305.....	A29.3:11 <sup>1</sup>
Reed, C. D. Forecasting for the farmer. 1900. p. 287.....	A29.6:28
Reed, W. M.:	
Irrigation in New Mexico, 1901. 1902. p. 37 .....	A10.3:119
Pecos River and its tributaries, New Mexico, irrigation along. 1902. p. 61 .....	A10.3:104
Pecos Valley, New Mexico, irrigation in; use of water in. 1900. p. 85.....	A10.3:86
Reeve, James K. Truck farming. p. 663.....	A1.1:888
Reforestation in Leeward Islands (Alexander). 1901. p. 254.....	A29.6:29
Refractions, atmospheric, at surface of water (Abbe). 1896. p. 371.	A29.6:24
Refrigeration, influence of, on fruit industry (Taylor). 1900. p. 561.	A1.10:900
Reh, L. Scale insects on American fruit imported into Germany, abstracted and translated by E. A. Schwarz. 1900. p. 79.....	A9.6:22
Rehart, S. V. Snow and rain, seasonal, prediction of. 1894. p. 26.	A29.6:22
Reichert methods, application of, to mixed butters (Besana). 1890. p. 105.....	A7.3:24
Reid, George. <i>See</i> , for reports as Superintendent, 1865, Farm, experimental, Agriculture Department.	
Reid, James D. Pleuro-pneumonia among cattle in Great Britain, Scotland, and Ireland. 1891. p. 401 .....	A4.1:889-90
Renoe, Elizabeth. Ice caves at Flagstaff, Ariz. 1901. p. 54.....	A29.6:29
Renoe, Milton G., short biography of. 1897. p. 484 .....	A29.6:25
Renovated butter:	
Household tests for detection of oleomargarine and (Patrick). 1901 .....	A1.9:131
Identification of (Patrick). 1902. p. 115.....	A7.3:67
Renovated butter and other dairy products, rules and regulations prescribed for inspection of, under act of May 9, 1902, and information concerning "adulterated butter," June 21, 1902....	A4.5:94
Same, Oct. 1, 1902 .....	A4.5:97
Same, Nov. 1, 1902.....	A4.5:98
Rent unions in Bengal, India. 1875. p. 395 .....	A27.9:13
Reptiles:	
Annotated list of, collected in Idaho by C. Hart Merriam and party, 1890 (Stejneger). p. 109.....	A5.5:5
Importation of, into Hawaii, order preventing. 1902.....	A5.4:36
<i>See also</i> Tres Marias Islands, Mexico.	
Reptiles and batrachians:	
Collected by C. Hart Merriam and Vernon Bailey in San Francisco Mountain plateau and desert of Little Colorado, Arizona, annotated list of, with descriptions of new species (Stejneger). 1890. p. 103 .....	A5.5:3
Collected by C. Hart Merriam and party in Idaho, 1890, annotated list of (Stejneger). 1891. p. 109 .....	A5.5:5
Collected by Death Valley expedition in 1891, annotated list of, with descriptions of new species and field notes by Merriam (Stejneger). p. 159.....	A5.5:7

# Index

	Classification no.
Rescue grass:	
Circular on (Shear). 1900 .....	A3.4:26
Seeds of (Hillman). 1902 .....	A19.3*:R31
Reservoir system of Cache la Poudre Valley, report on (Nettleton). 1901 .....	A10.3:92
Reservoirs, some typical, in Rocky Mountain States (Mead). 1901. p. 415. ....	A1.10:901
Resin compounds, experiments with, on Phylloxera, in 1890 (Koebele). p. 37 .....	A9.3:23
Resinous contents and their distribution in trees of long-leaf pine, chemical study of, before and after tapping for turpentine (Gomberg). 1893. p. 34 .....	A13.3:8
Respiration, organs of, noncontagious diseases of, of cattle (Lowe). p. 101 .....	A4.2:C29 <sup>2</sup>
Respiration calorimeter, new, description of, and experiments on conservation of energy in human body (Atwater and Rosa). 1899 .....	A10.3:63
Respiration calorimeter of special construction, preliminary investigations of metabolism of nitrogen and carbon in human organism with (Atwater and others). 1897 .....	A10.3:44
Respiratory organs, diseases of, of horses (Harbaugh). p. 87 .....	A4.2:H78
Revenue, mountain roads as a source of (Abbott). 1901. p. 527 .....	A1.10:901
<i>See also</i> Internal revenue.	
Reynolds, A. and M. Australasia, meat trade of. p. 92 .....	A4.1:893-4
Reynolds, Joseph. <i>See</i> , as joint author, Brown, Simon.	
Reynolds, M. H. Veterinarian, experiment station, as member of State board of health. 1898. p. 14 .....	A4.3:22
Rhawn, William H. Address of, before national road conference. July, 1894. p. 39 .....	A22.3:10
Rheea fiber, information concerning (Blecllynder). 1870. p. 227 .....	A27.9:8
Rhine region, regimen of, high-water phenomena and their prediction (Tein). 1894. p. 117 .....	A29.3:11 <sup>1</sup>
Rhine vintage, note on. 1888. p. 578 .....	A27.9:26
Rhinoceros beetle, notes on (Chittenden). 1902. p. 28 .....	A9.6:38
Rhode Island:	
Birches in, occurrence of <i>Bucculatrix canadensisella</i> on (Packard). 1892. p. 14 .....	A9.7:5
Farm resources and products of. 1868. p. 8 .....	A27.9:6
Road improvement, extract from governor's message (Dyer). p. 9 .....	A22.4:33 <sup>1</sup>
Weather of, notes on (Abbe). 1898. p. 565 .....	A29.6:26
<i>See also</i> Providence.	
Rhubarb, forcing, results of (Smith). 1899. p. 13 .....	A1.9:107
Rice, (Mrs.) M. E. <i>Entilia sinnata</i> , notes on. 1893. p. 243 .....	A9.7:5
Rice, Thomas D. <i>See</i> , as joint author, Fippin, Elmer O.	
Rice:	
Cultivation, production, and distribution of, in United States and foreign countries. ....	A27.8:6
Cultivation of (Faveau). p. 174 .....	A1.1:867
same. 1874. p. 372 .....	A27.9:12
Culture in United States, present status of (Knapp). 1899 .....	A6.3:22
same (Knapp). 1900 .....	A1.9:110
Growers of, circular to. n. d. ....	A5.4:5
India, crop of. 1894. p. 147 .....	A27.9:33
Irrigation of—	
in North Carolina, South Carolina, and Georgia (Keeney). 1902. p. 59 .....	A10.3:113
in United States. 1902 .....	A10.3:113
on uplands of Louisiana and Texas (Bond). 1902. p. 11 .....	A10.3:113
Japan culture (Tamari). 1885. p. 187 .....	A1.7:9
Louisiana crop, statement on, 1860-1869. p. 430 .....	A27.9:8
Meal, feeding to pigs. 1901. p. 24 .....	A1.9:144
Production of, 1850-1870. p. 12 .....	A27.8:10
same, in United States. 1894. pp. 483, 630 .....	A27.9:32
Soils of South Carolina (Whitney). 1893. p. 77 .....	A27.3:6
<i>See also</i> Crops, principal.	
Rice Association, American, officers of. 1900. p. 643 .....	A1.10:900.
Same. 1901. p. 637 .....	A1.10:901.

	Index
	Classification no.
Rice region, Weather Bureau Service, instructions governing (Berry).	A29.12:C81
Rice stations of Weather Bureau, instructions and code for enciphering reports at .....	A29.12:C82
Richards, Charles Russ:	
Heating value of corn, calorimetric determination of. 1898. p. 95.	A10.3:49
Manual training and apprentice system. 1894. p. 73 .....	A10.3:20
Richards, Edgar:	
Alcohol, withdrawal from bond for scientific purposes. 1889. p. 71.	A7.3:24.
Apples, analyses of. p. 350 .....	A1.1:886
Butter, American, analyses of, averages of. 1886. p. 23 .....	A7.3:16
Phosphoric acid determination, comparison of official and nitric acid methods for. 1886. p. 24 .....	A7.3:12
Soil analysis, principles and methods of. 1886.....	A7.3:10
Richards, Ellen H. Common food materials, nutritive value of. 1893. p. 3 .....	A1.8:54
Richards, George W.:	
Clouds—	
cirrus, on northwest side of a storm. 1897. p. 212 .....	A29.6:25
upper, and weather changes. 1898. p. 106 .....	A29.6:26
Richards, George W. and Abbe, Cleveland. Cloud observations, form for record of. 1898. p. 456 .....	A29.6:26
Richards, M. V.:	
Railroads, relation of, to agriculture. 1902. p. 107 .....	A10.3:120
Road improvement, prospects for, in the South. 1902. p. 17....	A22.3:23
Richardson, Clifford:	
Ammonium citrate solution, neutrality in, indicator for detection of. 1886. p. 21 .....	A7.3:12
Cereals, American, wheat, oats, barley, and rye, chemical composition and physical properties of, 3d report, 1886 .....	A7.3:9
Grasses, American, chemical composition of, from investigations in laboratory of Department of Agriculture, 1878-1882. p. 117..	A1.8:32
Milk of Washington not normal. 1888. p. 24.....	A7.3:19
Plants, certain, of economic value as food for man and stock, in Texas and New Mexico. p. 282 .....	A1.1:887
Sorghum and sugar production, character and composition of soils best adapted to. 1886. p. 60.....	A7.3:10
Spices and condiments adulteration of—	
1886. p. 291 .....	A1.1:886
1887. p. 129 .....	A7.3:13*
Wheat, what science can teach about. 1883. p. 67.....	A1.7:2
Wheat and corn, American, investigation of composition of—	
1883 .....	A7.3:1
same, errata. 1884. p. 98 .....	A7.3:4
1884. 2d report .....	A7.3:4
<i>See also</i> , as editor of Proceedings, 1886-1888, Chemists, Official Agricultural, Association of.	
<i>See also</i> , for report as assistant chemist, Chemistry Bureau, Agriculture Department. 1883.....	A7.1
Richardson, H. W.:	
Acetylene gas, substitution of, for oil in storm-warning lanterns. 1902. p. 154 .....	A29.3:31
Temperatures at Duluth, Minn. p. 463 .....	A29.6:27
Richardson, R. W. Good roads movement, character of. 1902. p. 27.....	A22.3:23
Richman, Irving B. St. Gall, Switzerland, cost of hauling farm products over wagon roads at. p. 11.....	A22.4:27
Richmond, H. Droop:	
Milk, fat in, estimation of. 1890. p. 162 .....	A7.3:24
Specific gravity, determination of rise in, on allowing milk to stand after milking. 1894. p. 191.....	A7.3:43
Richmond, ——. <i>See</i> Van Slyke, Lucius Lincoln.	
Richmond, Va., brass river gage at, description of, and its method of support (Leisenring). 1899. p. 456 .....	A29.6:27
<i>See also</i> Virginia good roads convention.	
Richmond Canal. <i>See</i> Logan and Richmond Canal, Utah.	
Richmond County, N. Y. lung plague in, history of (Rose). p. 468....	A4.1:884

# Index

	Classification no.
Riley, Charles Valentine:	
Address of, as president of Association of Economic Entomologists, at 2d annual meeting. 1891.....	A9.7:3
Australian <i>Scymnus</i> established and described in California. 1892. p. 127 .....	A9.7:5
Bees, report on. 1894. p. 350 .....	A9.7:6
Cotton worm—	
address on, before cotton convention at Atlanta. 1881. p. 153. ....	A1.1:881-2
same, p. 153 .....	A9.1:882
final report on, and chapter on boll worm. 1885.....	A8.1:4
<i>Dendrotettix</i> genus, report of. 1893. p. 254.....	A9.7:5
<i>Diabrotica 12-punctata</i> , habits and life history of. 1891. p. 104. ....	A9.7:4
Digger-wasp, larger, report on. 1892. p. 248.....	A9.7:4
English sparrow, insectivorous habits of. 1889. p. 111.....	A5.3:1
Entomology, applied—	
general truths in. p. 323.....	A1.1:884
outlook for, address on. 1891. p. 181.....	A9.7:3
some recent matters of international concern. 1888. p. 126. ....	A9.7:1
Fluted scale, Australian hymenopterous parasite of. 1890. p. 248. ....	A9.7:2
Grape phylloxera, notes on. p. 405.....	A1.1:884
Herbarium pest, new, report on. 1891. p. 108.....	A9.7:4
same, further notes on. 1892. p. 40.....	A9.7:5
Hessian fly, remarks on. 1888. p. 107 .....	A9.7:1
Hop plant-louse, notes on. 1888. p. 70 .....	A9.7:1
<i>Icerya</i> ; its probable origin the islands of Bourbon and Mauritius. 1887. p. 27 .....	A9.3:15
Insect collection of large museum, suggestions for. 1890. p. 342. ....	A9.7:2
Insect pests of household—	
bedbugs and red ants. 1889. p. 104.....	A9.7:2
carpet beetle or so-called Buffalo moth. 1889. p. 127.....	A9.7:2
cockroaches. 1890. p. 266.....	A9.7:2
true clothes-moths. 1890. p. 211 .....	A9.7:2
Insecticide appliances, report on. 1889. pp. 243, 263.....	A9.7:1
Insects—	
new injurious, of year. 1892. p. 16.....	A9.7:5
occurring in foreign exhibits of World's Columbian Exposition. 1894. p. 213.....	A9.7:6
senses of, report of. 1894. p. 33 .....	A9.7:7
small collection of, made during Death Valley expedition. 1893. p. 235 .....	A5.5:7
International forestry exhibition, Edinburgh, Scotland, report of. 1884. p. 167.....	A1.1:884
<i>Ixodes bovis</i> , remarks on. 1869. p. 168 .....	A1.2:C29 <sup>1</sup>
Kerosene emulsion and pyrethrum. 1891. p. 32.....	A9.7:4
Lady-bird parasite, report on. 1888. p. 101.....	A9.7:1
Locusts, destructive; a popular consideration of a few of more injurious locusts (or "grasshoppers") of U. S., with best means of destroying them. 1891.....	A9.3:25
<i>Megilla</i> parasite, additional note on. 1889. p. 338.....	A9.7:1
Mite, six-spotted, of orange. 1890. p. 225.....	A9.7:2
Morelos orange fruit-worm, report on. 1888. p. 45.....	A9.7:1
Mulberry silkworm .....	A.9.3:9
Ox bot in United States. 1892. p. 302 .....	A9.7:4
<i>Panchlora</i> , further notes on. 1891. p. 119.....	A9.7:4
Parasitic and predaceous insects in applied entomology. 1893. p. 130 .....	A9.7:6
Parsnip web-worm, report on. 1888. p. 94.....	A9.7:1
Periodical cicada, or seventeen-year locust—	
circular relative to .....	A9.2:P41
report on. 1885 .....	A9.3:8
Plants and insects, some interrelations of. 1892. p. 358.....	A9.7:4
<i>Platypsyllus</i> —	
egg and ultimate larva. 1890. p. 244.....	A9.7:2
systematic relations of, as determined by the larva. 1888. p. 300 .....	A9.7:1
<i>Pronuba</i> and yucca pollination, notes on. 1889. p. 367.....	A9.7:1
Rose chafer, report on. 1890. p. 295.....	A9.7:2

	Index Classification no.
Riley, Charles Valentine—Continued	
Rose saw-flies in United States. 1892. p. 6.....	A9.7:5
Scale insects of orange in California, particularly the icerya or fluted scale, alias white scale, alias cottony cushion-scale, etc., address on. 1887. p. 9.....	A9.3:15
Silkworm, being brief manual of instructions for production of silk. 5 editions.....	A1.6:11
Thalassa and tremex, habits of. 1888. p. 168.....	A9.7:1
Viviparous cockroach. 1891. p. 443.....	A9.7:3
Willow-shoot saw-fly. 1888. p. 8.....	A9.7:1
Yucca insects and yucca pollination, further notes on. 1893. p. 300.....	A9.7:5
See also, as collector, Howard, Leland Ossian; as joint editor, In- sect life.....	A9.7:
See also, for reports as Entomologist, Agriculture Department, 1879, 1882-93.....	A9.1:
See also, as joint author, Walsh, Benjamin Dann.	
Riley, Charles Valentine, and Howard, Leland Ossian. Plum cur- culio, report on. p. 57.....	A1.1:888
Same, p. 57.....	A9.1:888
Riley, Charles Valentine, and Marlatt, Charles Lester:	
Clover mite, report on. 1890. p. 45.....	A9.7:3
Wheat and grass saw-flies, notes on. 1891. p. 168.....	A9.7:4
Riley, Charles Valentine, entomological writings of, bibliography of more important (Henshaw). 1889. p. 99.....	A9.2:B47 <sup>1</sup>
Rinderpest. See Cattle plague.	
Ringwalt, Samuel. Horse, report on, from practical experience in Army. p. 321.....	A1.1:866
Ringworm. See Cattle.	
Rio de Janeiro, exhibit at, note on. 1866. p. 235.....	A27.9:4
"Rio de Janeiro," Pacific mail steamship, wreck of (McAdie). 1901. p. 61.....	A29.6:29
Rio Grande, N. J.:	
Sorghum sugar experiments at—	
1887 (Hughes). p. 246.....	A1.1:887
same, p. 67.....	A7.3:17
1887 (Edson). p. 250.....	A1.1:887
same, p. 71.....	A7.3:17
1888 (Edson). p. 29.....	A7.3:18
1888 (Hughes). p. 268.....	A1.1:888
same, with additional matter. p. 29.....	A7.3:20
1888 (Edson). p. 20.....	A7.3:18
1888 (Wiley). p. 7.....	A7.3:20
1889 (Horton). p. 58.....	A7.3:26
1889 (Wiley). p. 14.....	A7.3:26
Sorghum-sugar factory at, methods employed by (Hughes). 1884. p. 54.....	A7.3:3
Rio Grande region, Texas, from Brazos Santiago to El Paso County, collection of plants made by G. C. Nealley in region of (Coulter). 1890. p. 29.....	A6.5:1
Rio Grande, valley of, agriculture in. 1870. p. 479.....	A27.9:8
Ripe rot of grapes and apples (Southworth). 1891. p. 164.....	A28.5:6
Ripley, Chauncey B. Address of, before convention of National League for Good Roads, Washington. 1893. p. 70.....	A10.3:14
Rising, W. B. See, as collaborator, Wiley, Harvey Washington.	
Ritz, Philip. Agricultural resources of eastern Oregon and Wash- ington Territory. 1869. p. 384*.....	A27.9:7
Rivas, Nicaragua:	
Meteorological observations at, monthly notes on 1898 (Abbe). pp. 61, 162, 210, 307, 408, 459, 541.....	A29.6:26
same, 1899 (Flint). pp. 11, 97, 153, 193, 249, 299, 360, 462, 509, 546.....	A29.6:27
Rainfall at, 1880-98 (Flint). p. 304.....	A29.6:26
River and flood service:	
Bulletins of.....	A29.14:
Chart of. 1897.....	A29.2:R52

\* By a misprint, this page number appears twice.



# Index

Classification no.

## River and flood service—Continued

### Monthly notes on—

Nov., 1896–May, 1898 (Morrill).....	A29.6:24
June–July, 1898 (Kriechelt) .....	A29.6:26
Aug., 1898 (Garriot) .....	A29.6:26
Sept., 1898–May, 1899 (Frankenfield) .....	A29.6:26–27
June–July, 1899 (Kriechelt) .....	A29.6:27
Aug., 1899–May, 1902 (Frankenfield).....	A29.6:27–30
June, 1902 (Hunt) .....	A29.6:30
July–Oct., 1902 (Frankenfield) .....	A29.6:30
Note on (Hyatt). 1899. p. 50 .....	A29.3:24
same (Pindell). 1899. p. 51 .....	A29.3:24

River and flood service charts, showing area covered by water of Mississippi River in April, 1897 .....	A29.2:R52 <sup>1</sup>
---	------------------------

River and rainfall observers, special, of Weather Bureau, instructions to. 1902.....	A29.12:R52 <sup>3</sup>
--	-------------------------

*See also* Rainfall observers.

River and rainfall stations, special, daily precipitation at, 1893–95. 1900 .....	A29.2:P91
---	-----------

### River floods:

Note on (Abbe). 1897. p. 209.....	A29.6:25
Rate of advance of (Abbe). 1895. p. 341.....	A29.6:23

River forecast stations, establishment and inspection of (Marbury). 1899. p. 150 .....	A29.3:24
--	----------

### River gages:

Automatically recording, introduction of (Fulton). 1902. p. 220.	A29.3:31.
Brass, description of, at Richmond, Va., and its method of support (Leisenring). 1899. p. 456.....	A29.6:27
Mississippi Valley, upper (Carlisle). 1902. p. 222 .....	A29.3:31

River observers, special, instructions for (Russell). 1892.....	A29.12:R52
---	------------

River Plata countries, manufacture and exportation of tasajo or jerked beef by. p. 399.....	A4.1:899
---	----------

### River stages:

Daily .....	A29.10:
Daily, charts showing, in feet. 1892 .....	A29.2:C38
Forecasts of Mississippi and Ohio rivers and tributaries in periods of low water, importance of (Smyth). 1902. p. 146.....	A29.3:31
Predictions in United States (Russell). 1894. p. 89.....	A29.3:11 <sup>1</sup>
Report of (Russell). p. 483 .....	A29.1:891 <sup>3</sup>

### Rivers:

Four great, of Siberia (Sperk). 1894. p. 101 .....	A29.3:11 <sup>1</sup>
Freezing and opening of, dates of. 1864. No. 2. p. 64; No. 3. p. 25.....	A27.9:2

Of small drainage area, forecasting for, especially those of North Carolina (Herrmann). 1902. p. 158 .....	A29.3:31
--	----------

Principal, of United States, daily stages of, 1890–99.....	A29.10:
Weather Bureau work in connection with. 1896.....	A29.3:17

Riverside, California, insect control in (Havens). 1900. p. 83.....	A9.6:22
---	---------

*See also* Gage canal.

Rives, Wright. Cabbage worms, remedies for. p. 134.....	A1.1:883
Same, p. 134.....	A9.1:883

Roaches, injury to files in Treasury Department by. 1888. p. 67...	A9.7:1
--	--------

Road associations, national, State, and local, and kindred organizations in United States, list of.....	A22.4:36
---	----------

### Road building:

Convict labor in. <i>See</i> Convict labor.	
Cooperative (Stone). 1895. p. 487.....	A1.10:895
Facts and suggestions (Earle). 1901. p. 87 .....	A22.3:21
Few practical suggestions on (Ross). 1902. p. 18 .....	A22.3:22
From engineer's standpoint (Campbell). 1901. p. 45 .....	A22.3:21
Massachusetts road laws and (Ross). 1901. p. 34.....	A22.3:21
Minnesota State aid to (Choate). 1898.....	A22.4:32
Mountainous country (Kelsey). 1902. p. 63.....	A22.3:23
New Jersey State aid to (Burrough). 1894.....	A22.3:9
Note on (Branch). 1902. p. 44.....	A22.3:23
Ohio (Dodge). 1895. p. 16.....	A22.3:17
Pioneer, historical paper on (Hermann). 1902. p. 48.....	A22.3:25



	<b>Index</b>
	<b>Classification no.</b>
Road building—Continued	
Practical problems in (Twiggs). 1902. p. 53 .....	A22.3:23
Progress of, in United States (Eldridge). 1899. p. 367 .....	A1.10:899
Recent progress in. 1899. p. 749 .....	A1.10:899
Southern States, some essentials in modern systems of (Holmes). 1902. p. 82 .....	A22.3:23
United States—	
historical and technical papers on (Stone). 1895 .....	A22.3:17
progress of, reports by delegates to national road parliament, Atlanta, Ga., Oct. 17-19, 1895 .....	A22.3:19
Road business a question of education (Daniels). 1901. p. 66 .....	A22.3:21
Road conference, national. <i>See</i> Asbury Park, N. J.	
Roads congress. <i>See</i> Buffalo, N. Y., International good roads con- gress.	
Road conventions in Southern States and object-lesson roads con- structed under supervision of Office of Public Road Inquiries with cooperation of Southern Railway, 1902 .....	A22.3:23
<i>See also</i> Jefferson memorial and interstate good roads convention— Minnesota good roads convention—New York State, boards of supervisors of—Texas good roads convention—Virginia good roads convention.	
Road Inquiries Office, Public, Agriculture Department [formerly Office of Road Inquiry]:	A22
Circular letters relative to cooperation in work of .....	A22.4
Work of, for farmer (Stone). 1897. p. 175 .....	A1.10:897
Road materials:	
Arkansas (Branner). 1894 .....	A22.3:4
Freight rates and, in certain States north of Ohio River, informa- tion regarding. 1894 .....	A22.3:6
same, in Eastern and Southern States. 1894 .....	A22.3:7
Laboratory for physical and chemical examination of .....	A22.2:L11
Transportation rates and, information regarding, in certain States west of Mississippi River. 1894 .....	A22.3:5
Road parliament, national:	
Central committee of. 1899. p. 701 .....	A1.10:899
Notice of meeting of, Sept. 15, 1898 .....	A22.2:N21
<i>See also</i> Atlanta, Ga., national road parliament.	
Road problem (Patullo). 1901. p. 84 .....	A22.3:21
Road question:	
Farmer's views on (Bean). 1901. p. 67 .....	A22.3:21
Importance of (Longino). p. 18 .....	A22.3:21
Social, commercial, and economic phases of (Moore). 1900 .....	A22.4:34
Road situation in Iowa (Heaps). 1901. p. 64 .....	A22.3:21
Road stones and problems therewith connected (Whittle). 1897 ...	A22.4:29
Road system:	
Better, simple plan for (Polsley). 1901. p. 98 .....	A22.3:21
Georgia, improvement of (Sheffield). 1894 .....	A22.3:3
Government, of Yellowstone National Park (Chittenden). 1901. p. 72 .....	A22.3:21
Pennsylvania's (Hamilton). 1901. p. 25 .....	A22.3:21
Roads:	
Act to provide for construction of, by local assessment, county, and State aid passed by New York assembly, Oct. 13, 1894 ....	A22.4:15
Address on (Greene). 1895. p. 34 .....	A22.3:17
Belgium (Valliant). 1901. p. 87 .....	A22.3:21
Best, for farms and farming districts. 1894. p. 501 .....	A1.10:894
Brick wheel-track (Long). 1901. p. 68 .....	A22.3:21
Building. <i>See</i> Road building.	
Common, and railroads, relation of (Haupt). 1902. p. 61 .....	A22.3:22
Common schools as affected by (Abercrombie). 1902. p. 39 ....	A22.3:23
Convict labor on. <i>See</i> Convict labor.	
Country—	
brick paving for. 1896 .....	A22.4:25
bridges of (Wentworth). 1895. p. 48 .....	A22.3:11
construction of good (Eldridge). 1898. p. 317 .....	A1.10:898
description of formation of (French). p. 538 .....	A1.1:866

# Index

	Classification no.
Roads—Continued	
Country—Continued	
maintaining, comments on systems of. 1896 .....	A22.4:20
same, rev. ed .....	A22.4:24
repairs of (Hewitt). 1894. p. 17 .....	A22.3:8
road laws and. p. 348 .....	A1.1:868
traffic of. 1896 .....	A22.4:19
Earth—	
hints on their construction and repair (Stone). 1894 .....	A22.3:8
report on (Eldridge). 1902 .....	A1.9:136
Forces which operate to destroy (Whittle). 1897 .....	A22.4:29
Good—	
duty of General Government toward (Falkner). 1902. p. 31 .....	A22.3:23
extracts from messages of governors (Stone). 1895 .....	A22.3:14
farmers' views of, and how to get them (Creasy). 1901. p. 78 .....	A22.3:21
for farmers (Eldridge) .....	A1.9:95
going in debt for (Thayer). 1897 .....	A22.4:26
hearings on, before Agriculture Committee, House of Repre-	
sentatives. 1893. p. 85 .....	A10.3:14
how to procure means to build (Jackson). 1895. p. 29 .....	A22.3:11
how to secure (Montague). 1902. p. 36 .....	A22.3:25
importance of, in war and peace (Miles). 1902. p. 39 .....	A22.3:25
Kentucky organizations for (Van Pelt). 1901. p. 81 .....	A22.3:21
material progress and (Moore). 1902. p. 26 .....	A22.3:23
money value of, to farmers (Latta). 1896 .....	A22.4:23
movement, character of (Richardson). 1902. p. 27 .....	A22.3:23
must farmer pay for? (Dorner). 1898 .....	A22.4:31
press and (Battey). 1902. p. 55 .....	A22.3:22
press work for (Battey). 1901. p. 89 .....	A22.3:21
question of the hour (Daniel). 1902. p. 68 .....	A22.3:23
relation of, to industrial development (Hays). 1902. p. 78 .....	A22.3:23
stereopticon views of. 1901. p. 71 .....	A22.3:21
suggestions to friends of (Heyward). 1902. p. 47 .....	A22.3:23
work for new century (Stone). 1901. p. 52 .....	A22.3:21
work of Federal Government for (Dodge). 1902. p. 43 .....	A22.3:23
<i>See also</i> Asbury Park, N. J., national conference, 1894 — New	
Jersey — New York.	
Gravel, in Hennepin County, Minn., method of construction and	
cost of (Cooley). 1901. p. 96 .....	A22.3:21
Improvement of—	
address at Raleigh, N. C., on, February 5, 1897 (Stone). p. 19 .....	A22.4:28
addresses on (Stone). 1894 .....	A22.4:14
Congressional action in, necessity of (Stone). 1902. p. 23 .....	A22.3:25
convict labor in, plan for use of (Brewster). 1895. p. 7 .....	A22.3:16
Florida, progress of (Jennings). 1901. p. 60 .....	A22.3:21
governors' messages. 1899 .....	A22.4:33
Higbie-Armstrong act .....	A22.4:35
Jefferson County, Ala. (Jackson). 1902. p. 31 .....	A22.3:23
legislation for (Eldridge). 1901. p. 679 .....	A1.10:907
letter to Illinois Farmers' Institute on (Stone). 1897. p. 23 .....	A22.4:28
North Carolina, use of convicts in (Holmes). 1895 .....	A22.3:16
prospects for, in the South (Richards). 1902. p. 17 .....	A22.3:23
remarks on (Fonde). 1902. p. 41 .....	A22.3:23
requisites to (Clift). 1902. p. 26 .....	A22.3:23
rural free mail delivery in relation to (Machen). 1901. p. 92 .....	A22.3:21
societies for, State and local, appeal for organization of. 1896 .....	A22.4:22
Location and construction of (Patton). 1902. p. 30 .....	A22.3:25
Macadamized—	
electric street railways and, relation between (North). 1902.	
p. 59 .....	A22.3:22
methods of construction of. 1896 .....	A22.4:21
repairs of (Harrison). 1898 .....	A22.4:30
report on (Ashburner). 1895. p. 31 .....	A22.3:17
selection of materials for (Page). 1900. p. 349 .....	A1.10:900
Management of—	
State laws relating to, 1888-93 (Stone) .....	A22.3:1
State laws relating to, enacted 1894-95 .....	A22.3:18

**Roads—Continued**

Materials for. <i>See</i> Road materials.	
Mountain—	
as a source of revenue (Abbott). 1901. p. 527.....	A1.10:901
report on (Abbott). 1900. p. 183.....	A1.10:900
Object lesson—	
Government cooperation in work (Dodge). 1901. p. 409....	A1.10:901
report on (Stone). 1897. p. 373.....	A1.10:897
Public—	
convict labor on, use of (Graham). 1895. p. 34.....	A22.3:11
improvement of, in North Carolina (Holmes). 1894. p. 513.	A1.10:894
traction tests on (Neely). 1896.....	A22.3:20
Railroads and (Spencer). 1902. p. 41.....	A22.3:25
Relation of, to rural population (Dodge). 1902. p. 34.....	A22.3:23
Road-building materials and, of Georgia (McCallie). 1902. p. 50.....	A22.3:23
Road materials and freight rates in certain States north of Ohio River, information regarding. 1894.....	A22.3:6
same, in Eastern and Southern States. 1894.....	A22.3:7
Steel-track (Dickinson). 1901. p. 68.....	A22.3:21
Steel-track wagon (Dodge). 1898. p. 291.....	A1.10:898
Stone and shell (Humphreys). 1894. p. 52.....	A22.3:11
Stone, in New Jersey (Harrison). 1895. p. 23.....	A22.3:17
What our bad roads cost us (Coleman). 1895. p. 17.....	A22.3:11
<i>See also</i> Convict labor—Highways.	
Roads, Good, National Association of, officers of:	
1900. p. 664.....	A1.10:900
1901. p. 633.....	A1.10:901
Roads, Good, National League for:	
Officers of. 1898. p. 620.....	A1.10:898
Proceedings of convention of. 1893. p. 11.....	A10.3:14
Roadsters and trotters, breeding of (Lang). p. 157.....	A1.1:864
Robert, J. C. Blood serum, experiments with, as a preventive and cure for Texas fever. p. 482.....	A4.1:898
Roberts, Frank W. Sheep and wool in Cape Colony. p. 522.....	A4.1:898
Roberts, Isaac Phillips:	
Agricultural courses in the East, principles underlying formation of. 1900. p. 65.....	A10.3:76
Agricultural experiment stations, how can they reach and interest the farmers? 1889. p. 30.....	A10.5:1
Agricultural industry, our new. 1901. p. 124.....	A10.3:99
Farm, exodus from the, what are causes of? 1896. p. 80.....	A10.3:41
Science versus art. 1898. p. 69.....	A10.3:49
University extension work, how may it be best conducted by colleges of agriculture? 1898. p. 55.....	A10.3:49
Roberts, J. P. Milk qualities, science of developing and perpetuating. 1882. p. 86.....	A1.8:22
Roberts, John. Animals and animal products, imports and exports of. p. 611.....	A4.1:901
Robertson, W. Henry. Hamburg, dried apples in. 1894. p. 12....	A7.3:48
Robertson silage mixture. 1897. p. 7.....	A1.9:56
Robins, C. E. Florida, south, resources and productions of. 1889. p. 514.....	A27.9:27
Robinson, Henry A:	
Crop correspondents, manual of instructions to.....	A27.2:C88
Publications of Statistics Division, letter relating to. 1895.....	A27.2:P96
<i>See also</i> , for reports as Statistician, Agriculture Department, 1893-1896.....	A27.1:
Robinson, Jesse H:	
Seacoast telegraph lines, instructions to operators on. 1897.....	A29.12:Sel <sup>1</sup>
Telegraph and weather service. 1902. p. 145.....	A29.3:31
Telegraph service with West Indies. 1898. p. 410.....	A29.6:26
Robson, W. S., address of, before good roads convention of Texas, Feb., 1895. p. 11.....	A22.3:15
Rockall Island as meteorological station (Abbe). 1898. p. 311.....	A29.6:26
Rocket signals. <i>See also</i> Kerkam's kites with rocket signals.	

# Index

	Classification no.
Rocks, imbibition of (Hill). 1891. p. 213.....	A15.2:P94 <sup>1</sup>
<i>See also</i> Magnetic rocks.	
Rocky Mountain areas, agricultural notes on. 1866. p. 379.....	A27.9:4
Rocky Mountain basins, botany and agriculture of (Thompson). p. 125 .....	A1.1:866
Rocky Mountain goat:	
Note on. 1869. p. 56 .....	A27.9:7
Report on. p. 218.....	A1.1:867
Rocky Mountain grasses (Vasey). 1874. p. 154 .....	A27.9:12
Rocky Mountain locust:	
Abundance of, in 1885 (Bruner). p. 303.....	A1.1:885
Entomological Commission reports on.....	A8.1:
Habits, natural history, and means of counteracting injuries of (chaps. 8 and 13 of 1st Report of U. S. Entomological Com- mission. <i>See</i> A10.1:877). p. 264 .....	A1.1:877
Kansas and Colorado, in 1880 (Chipman). 1883. App. p. 55..	A8.1:3
Notes on (Bruner). 1888. p. 65.....	A9.7:1
Observations on—	
during summer of 1883 (Bruner). 1884. p. 51.....	A9.3:4
in Northwest in 1882 (Bruner). 1883. p. 7.....	A9.3:2
Reports and observations on. 1883 .....	A9.3:2
Report on, in 1880 (Marten). 1883. App., p. 50.....	A8.1:3
<i>See also</i> Locust— <i>Melanoplus spretus</i> .	
Rocky Mountain region:	
Eastern, grasses and forage plants and forage conditions of (Williams). 1898 .....	A3.3:12
Forest flora of (Sudworth). 1888. p. 153 .....	A13.3:2
Grasses and forage plants of (Rydberg and Shear). 1897.....	A3.3:5
Rocky Mountain States:	
Irrigation in (Ulrich). 1899.....	A10.3:73
Reservoirs in, some typical (Mead). 1901. p. 415 .....	A1.10:901
Rocky Mountains:	
Eastern slope of, grasses of Plains and, catalogue of. p. 217 .....	A1.1:870
Forest conditions of, especially in Colorado, Idaho, Montana, Wyoming, and New Mexico (Ensign). p. 41.....	A13.3:2
same, introduction to report. 1888. p. 7 .....	A13.3:2
Snowfall in, notes on (Abbe). 1900. p. 18 .....	A29.6:28
Rod, divining, use of, in search for water, note on (Abbe). 1900. p. 109 .....	A29.6:28
Rodents. <i>See</i> Arvicolinæ — Bandicoots — Bats — Blarina — Evo- tomys — Gophers — Grasshopper mouse — Ground squirrels — Guinea pigs — Hesperomys — Jack rabbits — Jumping mice — Kangaroo rats — Lemmings — Pika — Pocket gophers — Pocket mice — Rabbits — Rats — Voles.	
Roentgen rays, report on (Trowbridge). 1897. p. 348 .....	A29.6:25
Roesler, F. E. Artesian well investigation, field work in Texas. 1890. p. 243 .....	A15.2:Ar7
Rogers, G. O. Storms, local, on west coast of Mexico. 1894. p. 510.	A29.6:22
Rogers, George. Cattle show of Smithfield Club, notes on. p. 326.	A4.1:895-6
Roland, H. Whitfield. <i>See</i> , as joint author, McLean, L.	
Rolfs, Peter H. Pineapple growing. 1901 .....	A1.9:140
Rollins, Frank W. New Hampshire, road improvement in, extract from governor's message. p. 5 .....	A22.4:33
Rollins, John F. Florida as home for emigrants. 1872. p. 495....	A27.9:10
Romaine, Helmas:	
Horse breeding in New Jersey. p. 385.....	A4.1:889-90
Vermont Association of Road and Trotting Horse Breeders, exhi- bition of. p. 441 .....	A4.1:889-90
Rommel, George M:	
Beef cattle, American breeds of, with remarks on pedigrees. 1902.	A4.3:34
Horses, market classes of. p. 433.....	A4.1:901
same. 1902 .....	A4.3:37
Röntgen rays and cloudy condensation (Abbe). 1896. p. 167 .....	A29.6:24
Roofs, tin, as lightning conductors, notes on (Abbe). 1898. pp. 166, 258 .....	A29.6:26
Roos, Van Hamel. Poisoning by preserving in tin cans. 1892. p. 930 .....	A7.3:13 <sup>7</sup>

	<b>Index</b>
	<b>Classification no.</b>
Roosevelt, George W.:	
Animals, dead, disposition in Belgium, especially Brussels. p. 354.	A4.1:899
Belgium, cost of hauling farm products over wagon roads in. p. 1.	A22.4:27
Roosevelt, Robert B. Fish culture, report on. 1873. p. 183.	A27.9:11
Roosevelt, Theodore:	
Message, transmitting report of Secretary of Agriculture on forests, rivers, and mountains of southern Appalachian region. p. 3	A1.2:Ap4 <sup>2</sup>
New York, road improvement in, extract from governor's message. p. 6	A22.4:33
Root crops, cultivation of, in United States (Leverett). p. 95	A1.1:863
Root fungus of New Zealand (Wight). 1889. p. 199	A28.5:5
Root knot, cowpea resistant to (Webber and Orton). 1902. p. 22.	A19.3:17
Root-knot disease of peach, orange, and other plants in Florida, due to work of Anguillula (Neal). 1889.	A9.3:20
Root-rot disease, new, of cotton:	
Circular of inquiry on (Rusk).	A28.4:9
Report on (Atkinson). 1890. p. 262.	A9.7:3
Root rot of taro (Sedgwick). 1902.	A12.9:2
Ropes, strength of. 1898. p. 677.	A1.10:898
Roquefort cheese, manufacture of. 1868. p. 40	A27.9:6
Rosa, Edward Bennett. See, as joint author, Atwater, Wilbur Olin.	
Rose, Joseph Nelson:	
Big Horn Mountains of Wyoming, plants from. 1896. p. 567.	A6.5:3
Carmen Island, plants collected by Edward Palmer in 1890, on, list of. 1892. p. 129.	A6.5:1
Cocos Island, plants from, collected by U. S. S. "Albatross" in 1887-91, list of. 1892. p. 135	A6.5:1
Galapagos Islands, plants from, collected by U. S. S. "Albatross" in 1887-91, list of. 1892. p. 136.	A6.5:1
Mexico—	
useful plants of, notes on. 1899. p. 209	A6.5:5
western, and Arizona, list of plants collected by Edward Palmer in 1890, in. 1891. p. 91	A6.5:1
Mexico and Central America, plants of, studies of. 1897. p. 103.	A6.5:5
Mexico and United States, plants, mostly new, from, description of. 1895. p. 311.	A6.5:3
Plants, three new, descriptions of. 1893. p. 289	A6.5:1
Sonora and Colima, States of, Mexico, collection of plants made in, by Edward Palmer in years 1890 and 1891, report on. 1895. p. 293	A6.5:1
Tradescantia, three new species of, from U. S. 1899. p. 204.	A6.5:5
Treleasea, a new genus of Commelinaceæ. 1899. p. 207.	A6.5:5
Tres Marias Islands, plants of. 1899. p. 77.	A5.5:14
Weeds, two, new to United States. p. 355	A1.1:891
same. p. 355.	A6.1:891
See also, as joint author, Coulter, John M.—Vasey, George; as collector, Davenport, George E.	
Rose, W. H.:	
Pleuro-pneumonia among cattle in Maryland, District of Columbia, and Virginia. p. 51	A1.1:881-2
Swine plague, outbreak of, in Maryland and Virginia. p. 446	A4.1:884
Virginia, southern, cattle fever in. p. 461	A4.1:884
Rose, William. Lung plague, history of, in Richmond County, New York. p. 468	A4.1:884
Rose, insects injurious to, some (Chittenden). 1901	A9.6:27
Rose bug:	
Experience with (Smith). 1890. p. 113.	A9.7:3
same. 1891. p. 220.	A9.7:3
Means of extirpating (Glover). 1873. p. 30.	A27.9:11
Rose-chaffer:	
Circular relative to (Chittenden). 1895	A9.5:11
Report on (Riley). 1890. p. 295	A9.7:2
Rose leaf-beetle, report on (Chittenden). 1897. p. 60.	A9.6:7
See also Fuller's rose beetle.	
Rose saw-flies in United States (Riley). 1892. p. 6	A9.7:5



# Index

	Classification no.
Roseanthus, a new genus of Cucurbitaceæ, from Acapulco, Mexico (Cogniaux). 1896. p. 577.....	A6.5:3
Röse's method of estimating fat in milk, 1888-1889. 1890. p. 160..	A7.3:24
Roses:	
Blight or mildew of, sulphur for. 1867. p. 60 .....	A27.9:5
Buds of, two new cecidomyians destructive to (Coquillett). 1900. p. 44 .....	A9.6:22
Rosette. <i>See</i> Peach rosette.	
Ross, B. B.:	
Address of, as president of Association of Official Agricultural Chemists, at thirteenth annual convention. 1896. p. 6.....	A7.3:49
Ammonium phosphomolybdate, new reaction with. 1894. p. 97..	A7.3:43
Citrate-soluble phosphoric acid, determination of. 1893. p. 18..	A7.3:38
Ross, Charles W.:	
Road building, few practical suggestions on. 1902. p. 18.....	A22.3:22
Road laws and road building in Massachusetts. 1901. p. 34....	A22.3:21
Ross, D. B. Sugar analysis, notes on. 1889. p. 179 .....	A7.3:24
Ross, D. W.:	
Boise Valley, Idaho, duty of water as related to irrigation problems of. 1900. p. 219.....	A10.3:86
Canals in Idaho, distribution of water from. 1902. p. 199.....	A10.3:119
Water in Idaho, duty of. 1902. p. 221.....	A10.3:104
Rotation, direction of, notes on (Abbe). 1899. p. 361.....	A29.6:27
Rotch, Abbott Lawrence:	
Aerial voyages by balloons and kites. 1900. p. 553 .....	A29.6:28
Aeronautical conference, international, Strassburg, Germany, report on. 1898. p. 158.....	A29.6:26
Aeronautical congress, international, at Berlin, report on. 1902. p. 356.....	A29.6:30
Air, exploration of, progress in, with kites at Blue Hill Observatory, Mass. 1898. p. 355.....	A29.6:26
Atmosphere—	
circulation of, in tropical and equatorial regions. 1902. p. 181.	A29.6:30
systematic exploration of, by means of kites, method for. 1902. p. 66 .....	A29.3:31
Clermont-Ferrand, France, international hydrological, climatological, and geological congress, Sept. 28 to Oct. 2, 1896. p. 367 .....	A29.6:24
Cloud observations at Blue Hill Meteorological Observatory, Milton, Mass. 1897. p. 12 .....	A29.6:25
German Meteorological Society, eighth general meeting of. 1898. p. 160. ....	A29.6:26
Meteorological balloon ascension at Strassburg, Germany. 1901. p. 298.....	A29.6:29
Paris, international meteorological conference at, Sept. 1896, report on. p. 365 .....	A29.6:24
Roth, Filibert:	
Cuban pine, additional notes on. 1897. p. 89.....	A13.3:13 <sup>2</sup>
Forestry conditions and interests of Wisconsin. 1898 .....	A13.3:16
Grazing in forest reserves. 1901. p. 333.....	A1.10:901
Loblolly pine, additional notes on. 1897. p. 133.....	A13.3:13 <sup>2</sup>
Longleaf pine, additional notes on. 1897. p. 74 .....	A13.3:13 <sup>2</sup>
Marsh or pond pine, observations on. 1897. p. 169.....	A13.3:13 <sup>2</sup>
Shortleaf pine, additional notes on. 1897. p. 111.....	A13.3:13 <sup>2</sup>
Timber, an elementary discussion of characteristics and properties of wood. 1895 .....	A13.3:10
Timber physics, progress in. 1898.....	A13.4:19
Turpentine timber, field report on. 1893. p. 32 .....	A13.3:8
White pine, wood of. 1899. p. 73 .....	A13.3:22
Wood of five Southern pines, structure of. p. 133 .....	A13.3:13 <sup>1</sup>
same, rev. ed. 1897. p. 143.....	A13.3:13 <sup>2</sup>
Wood, uses of. 1896. p. 391 .....	A1.10:896
<i>See also</i> , as collaborator and as joint author, Fernow, Bernard Eduard.	



Rothamsted Experimental Station, England:	
Agricultural investigations at, six lectures on, under provisions of Lawes Agricultural Trust—	
1892. (Warrington).....	A10.3:8
1893. (Gilbert).....	A10.3:22
same, introduction (Gilbert). p. 46.....	A10.3:20
same, p. 9.....	A10.3:22
History and work of, lecture on (Warrington). 1892. p. 7.....	A10.3:9
Laboratory of, determination of nitric acid in soils by Schloesing's method at (Warrington). 1886. p. 47.....	A7.3:11
Nitrogen determination in soils of experimental fields at, and bearing on question of source of nitrogen of our crops (Lawes and Gilbert). 1882. p. 142.....	A1.8:31
Soils at, results of investigations on, being lectures delivered under provisions of Lawes Agricultural Trust (Dyer). 1902..	A10.3:106
Wheat grain and wheat straw grown at, in different seasons and by different manures, composition of ash of (Lawes and Gilbert). p. 85.....	A7.3:4
Rothrock, J. T. Trees, planting, a patriotic duty. 1895. p. 32....	A1.8:56
Roubaix, France, cost of hauling farm products over wagon roads at (Angell). p. 3.....	A22.4:27
Roumanian agriculture. 1876. p. 369.....	A27.9:14
Roundworms in sheep, goats, and cattle, treatment of (Stiles):	
1901.....	A4.4:35
1902. p. 7.....	A4.3:35
<i>See also</i> Verminous diseases.	
Rove beetle, another parasitic (Coquillett). 1891. p. 318.....	A9.7:3
Rowe, H. M. "Big head" (disease) of sheep in Utah. p. 230....	A4.1:901
Royal Agricultural Academy of Prussia. <i>See</i> Poppelsdorf, Prussia.	
Royal Agricultural College of England. <i>See</i> Cirencester, England.	
Royal Forest School of Bavaria. <i>See</i> Aschaffenburg, Bavaria.	
Royal Institute for Fruit and Vine Culture of Prussia. <i>See</i> Geisenheim-on-the-Rhine.	
Royal Prussian Meteorological Institution, semicentennial of, celebration of (Abbe). 1897. p. 491.....	A29.6:25
Rubber cultivation in Porto Rico (Cook). 1900.....	A6.4:28
Rubenson, Robert, short biography of. 1902. p. 488.....	A29.6:30
Ruffin, Edmund, pioneer in agricultural science (Cutter). 1895. p. 493.....	A1.10:895
Ruffin, John N. Butter in Paraguay. p. 521.....	A4.1:898
Rufous scale, West Indian, report of (Cockerell). 1892. p. 381....	A9.7:4
Runner's white corn. p. 186.....	A1.1:874
Rural art, current publications in. p. 517.....	A1.1:870
Rural common school, some problems of (True). 1901. p. 133....	A1.10:901
Rural cooperative banks in Russia. 1891. p. 146.....	A27.9:29
Rural districts—	
How insects affect health in (Howard). 1902.....	A1.9:155
Teaching domestic science in (Breed). 1902. p. 91.....	A10.3:120
same (Jacobs). 1902. p. 96.....	A10.3:120
Rural economy, works on agriculture and, list of. p. 597.....	A1.1:868
Rural free delivery:	
Is it advisable to distribute night forecasts of Weather Bureau by? (Blystone). 1902. p. 191.....	A29.3:31
Relation to road improvement (Machen). 1901. p. 92.....	A22.3:21
Report on (Greathouse). 1900. p. 513.....	A1.10:900
Routes, March 1. 1901.....	A1.10:900
same, sketch. 1901. p. 691.....	A1.10:901
Wagons of, weather symbols on (Pindell). 1902. p. 208.....	A29.3:31
Weather forecast cards by, note on (Abbe). 1900. p. 162.....	A29.6:28
Rural life, what can colleges of agriculture do to nourish a hearty sentiment for (Davenport). 1896. p. 82.....	A10.3:41
Rural organizations, history of our. p. 437.....	A1.1:875
Rural population, relation of roads to (Dodge). 1902. p. 34.....	A22.3:23
Rural production, applied science as a factor of. 1885. No.20. p. 31..	A27.9:23

# Index

	Classification no
Rural publications, Agriculture Department, recent:	
1871. p. 410 .....	A1.1:871
1872. p. 398 .....	A1.1:872
1873. p. 311 .....	A1.1:873
1874. p. 437 .....	A1.1:874
Rural road naming and house numbering (Davidson). 1901. p. 19	A22.3:21
Rural schools. <i>See</i> Schools, rural.	
Rusk, Jeremiah McLain:	
Address of, before convention of National League of Good Roads, Washington. 1893. p. 57 .....	A10.3:14
Animal Industry Bureau, letter regarding establishment of, etc. 1890 .....	A1.2:An 5 <sup>s</sup>
Annual reports [and] selected correspondence relating to export trade in live stock and meat products, 1889-92 .....	A1.2:R89
Live stock and meat products, selected correspondence relating to export trade in. 1893 .....	A1.8:53
Root-rot of cotton, circular of inquiry on. n. d. ....	A28.4:9
Straw and stubble of wheat, oats, rye, and barley, questions asked and specimens of, solicited. n. d. ....	A28.4:12
<i>See also</i> , for reports as Secretary of Agriculture, 1889-1892 .....	A1.1:
Russell, Daniel L. North Carolina, road improvement in, extract from governor's message. p. 6 .....	A22.4:33
Russell, Fremont L. <i>See</i> , as joint author, Gowell, Gilbert M.	
Russell, H. L. Cabbage and allied plants, bacterial disease of. 1898. p. 86 .....	A10.3:49
Russell, John L. Seasons, natural phenomena of, connection of with agriculture. p. 329 .....	A1.1:864
Russell, Thomas:	
Daily river stages on principal rivers of U. S., 1890-92 .....	A29.10:4
River observers, special, instructions for. 1892 .....	A29.12:R52 <sup>1</sup>
River stage predictions in United States. 1894. p. 89 .....	A29.3:11 <sup>1</sup>
River stages, report of. p. 483 .....	A29.1:891 <sup>s</sup>
Signals, Weather Bureau. 1892. p. 42 .....	A29.3:7
Russia:	
Agriculture in. 1875. p. 36 .....	A27.9:13
Black soil of (Grandeau). 1872. p. 501 .....	A27.9:10
Cereals and forage plants collected in, by M. A. Carleton, for Section of Seed and Plant Introduction, Agriculture Department. 1899 .....	A6.6:4
Cereals of—	
adapted for cultivation in United States (Carleton). 1900 .....	A6.3:23
official returns of. 1891. p. 474 .....	A27.9:29
Climatological atlas of, notes on (Abbe). 1900. p. 343 .....	A29.6:28
Crops of, estimates of (Peters). 1901 .....	A27.4:14
Egg exports from (Holloway). p. 512 .....	A4.1:900
European, yield of field crops in. 1884. No. 9. p. 37 .....	A27.9:22
Flax and hemp in. 1869. p. 237 .....	A27.9:7
Flax culture in. 1892. p. 75 .....	A11.5:4
Fruits of, adaptation of, to extreme northern portions of United States (Lyon). 1888 .....	A20.3:2
Grain exports, removal of restrictions upon. 1892. p. 282 .....	A27.9:30
Grain-producing districts of (Moffat). 1882. No. 51. p. 14 .....	A27.9:20
Hessian fly in (Koeppen). 1883. App., p. 41 .....	A8.1:3
Leather industry of (Holloway). p. 528 .....	A4.1:899
Live stock in, for 1898. p. 606 .....	A4.1:901
Locust in. 1883. p. 64 .....	A8.1:3
Meteorology in, notes on (Abbe). 1899. p. 103 .....	A29.6:27
Mineral phosphates of (Yermoloff). 1873. p. 22 .....	A27.9:11
Northern, grain in. 1870. p. 89 .....	A27.9:8
Rinderpest, official experiments in vaccination for. 1866. p. 235 .....	A27.9:4
Rural cooperative banks in. 1891. p. 146 .....	A27.9:29
Soil investigations (Sibirtzev). pp. 704, 807 .....	A10.6:12
Wheat of, British imports of 1852-67. p. 39 .....	A27.9:6
Wheat production and exportation in, course of, 1880-96 .....	A12.4:10
<i>See also</i> Caucasus — Odessa — St. Petersburg.	
Russian thistle:	
Circular relative to (Dewey) .....	A6.4:3

		<b>Index</b>
		<b>Classification no.</b>
Russian thistle—Continued		
Its history as a weed in United States, with an account of the means available for its eradication (Dewey). 1894.....		A6.3:15
Russian thistle and other troublesome weeds in wheat region of Minnesota and North and South Dakota. 1893.....		A1.9:10
Russian vetch. <i>See</i> Vetch.		
Russian zyemstvos, conflict of, with enemies of agriculture (Morachevski). 1902. p. 61.....		A9.6:38
Rust, George W. Calf-raising on plains. p. 177.....		A4.1:886
Rust. <i>See</i> Cereals—Orange—Prune.		
Rust mite and other orange pests, notes on. 1883. p. 9.....		A9.3:1
Rutland County, Vt., marbles of (Dorr). p. 448.....		A1.1:862
Rydberg, P. A.:		
Flora of Black Hills of South Dakota. 1896. p. 463.....		A6.5:3
Flora of the sand hills of Nebraska. 1895. p. 133.....		A6.5:3
Rydberg, P. A., and Shear, Cornelius L. Grasses and forage plants of Rocky Mountain region. 1897.....		A3.3:5
Ryder, Henry B. Farm animals of Europe. 1886. p. 353.....		A27.9:24
Rye:		
Crop condition, monthly notes on.....		A27.9:
Crop statistics, annual.....		A27.1:
European, production. 1891. p. 338.....		A27.9:29
Influence of, on price of wheat (Peters). 1900. p. 167.....		A1.10:900
Rusted, request for specimens of (Dabney). 1894.....		A28.4:14
Situation in 1891. p. 478.....		A27.9:29
Straw and stubble of, specimens of, requested (Rusk). n. d....		A28.4:12
<i>See also</i> Cereals, American—Crops, principal.		
Rye gall-gnat:		
Description of (Loew). 1883. App. p. 6.....		A8.1:3
New crop of, 1861, observations on (Wagner). 1883. App., p. 8.		A8.1:3
<i>See also</i> Hessian fly.		
Rykatcheff, M. Balloon ascension, results of, at St. Petersburg, May 20 to June 1, 1878. p. 392.....		A29.6:28
Sac and Fox Indian Agency, statistics of. 1885. No. 15. p. 38....		A27.9:23
Saccardo's Sylloge, genus <i>Scleroderma</i> in (Ellis). 1889. p. 23....		A28.5:5
Saccharine products, analysis of, provisional method for (Leach). 1902. p. 43.....		A7.3:65
Saccharine sorghums, seeds of, distributed by Section of Seed and Plant Introduction, Agriculture Department. 1899.....		A6.6:3
Saccharine matter, "diffusion process" for extracting, from sugar-yielding plants. 1869. p. 457.....		A27.9:6
Sachaline. <i>See</i> Giant knotweed.		
Sacramento, Cal.:		
Electric storms at, notes on (Abbe). 1897. p. 542.....		A29.6:25
State fair, cattle exhibited at, order providing for return of non-infected. 1899.....		A4.5:43
same. Aug. 18, 1900.....		A4.5:69
Sacramento County, Cal., cattle quarantine order for. Feb. 26, 1900..		A4.5:59
Sage, John R.:		
Weather forecasts, what classes are most benefited by? are they just what are needed? are they properly disseminated and utilized? 1899. p. 40.....		A29.3:24
Weather service, possible advances in. 1895. p. 463.....		A29.6:23
St. Domingo. <i>See</i> Santo Domingo.		
St. Elmo's fire, note on (Abbe). 1898. p. 565.....		A29.6:26
St. Gall, Switzerland, cost of hauling farm products over wagon roads at (Richman). p. 11.....		A22.4:27
St. Ignatius College, Cleveland, Ohio:		
Ground temperature observations at. 1902. p. 301.....		A29.6:30
Meteorological observatory of (Kenealy). 1901. p. 355.....		A29.6:29
St. Kitts, W. I.:		
Climatology of—		
1899 (Alexander). p. 583.....		A29.6:27
1900 (Abbe). p. 66.....		A29.6:28
1900 (Alexander). p. 330.....		A29.6:28
1901 (Alexander). p. 257.....		A29.6:29

# Index

Classification no.

St. Kitts, W. I.—Continued	
Hurricanes of (Alexander)—	
1899. p. 409 .....	A29.6:27
1902 .....	A29.3:32
Rainfall on (Alexander). 1900. p. 487 .....	A29.6:28
<i>See also</i> Basseterre.	
St. Landry Parish, La., soils and products of (Rapley). 1884. p. 29.	A1.8:35
St. Lawrence Island, climate of, 1894-99 (Henry). p. 457 .....	A29.6:27
St. Lawrence River, hailstorm on, notes on (Abbe). 1901. p. 506..	A29.6:29
St. Lawrence Valley, high areas north of, in October, November, and December (Garriott). p. 292 .....	A29.6:23
St. Louis, Mo.:	
Hailstorm, severe, at. 1902. p. 487 .....	A29.6:30
House sparrow and European tree sparrow at, history of (Widmann). p. 191 .....	A5.3:1
Live stock at. 1868. p. 22 .....	A27.9:7
Precipitation at, 1889-91. p. 108 .....	A29.6:20
Screw worm in, hominivorous habits of (Murtfeldt). 1891. p. 200.	A9.7:4
Tornado of May 27, 1896, at—	
low pressure in (Baier). p. 332 .....	A29.6:24
origin of (Walsh). 1897. p. 308 .....	A29.6:25
report on (Frankenfield). p. 77 .....	A29.6:24
same (Abbe). 1896. p. 225 .....	A29.6:24
United States Weather Bureau and Forest Park meteorological observatories, abstract of comparison of minimum temperatures recorded at, 1891 (Hammon and Duenckel). p. 12 .....	A29.6:30
<i>See also</i> Washington University.	
St. Martin's parish, La., soils and products of (Rapley). 1884. p. 9..	A1.8:35
St. Mary County, Md., soil survey of (Bonsteel). p. 125 .....	A26.5:900 <sup>1</sup>
St. Marys Falls Canal, water level in, relation of certain atmospheric changes to. 1894 .....	A29.2:Sa <sup>2</sup>
St. Mary's Parish, La., soils and products of (Rapley). 1884. p. 20..	A1.8:35
St. Michael, Alaska, ice and navigation at, notes on, 1878-99 (Abbe), p. 162 .....	A29.6:28
St. Paul, Minn., frost formation in, note on (Abbe). 1897. p. 401...	A29.6:25
<i>See also</i> Minnesota good roads convention.	
St. Petersburg, Russia:	
Balloon ascensions at, results of, May 20 to June 1, 1878 (Rykatcheff). p. 392 .....	A29.6:28
Dead animals in, disposition of (Holloway). p. 361 .....	A4.1:899
St. Thomas, W. I., dairy conditions in (Pearson). p. 38 .....	A4.1:901
St. Vincent eruption, meteorological conditions following, 1902 (Kimball). p. 267 .....	A29.6:30
Salem area, New Jersey, soil survey of (Bonsteel and Taylor). p. 125.	A26.5:901 <sup>1</sup>
Salinas Valley, lower, California, soil survey of (Lapham and Heileman). p. 481 .....	A26.5:901 <sup>1</sup>
Salinas Valley, Cal., irrigation problems in, report on (Marx). 1901. p. 193 .....	A10.3:100
Salinas Valley, Monterey Co., Cal., water-bearing gravels and formations tributary to underground water supply of (Nutter). 1901. p. 208 .....	A10.3:100
Salisbury, George N.:	
Forest clearing and cultivation, effect of, upon water supply and soil, rainfall, temperature. 1899. p. 91 .....	A29.3:24
Irrigation and its relation to State weather-service work. 1894. p. 24 .....	A29.3:14
Meteorological study, under existing conditions of Weather Bureau station work, is it practicable to require assistants to pursue a systematic course of? 1902. p. 82 .....	A29.3:31
Utah, characteristics of, in relation to State weather-service work. 1894. p. 27 .....	A29.3:14
Weather Bureau and the public, relations between. 1899. p. 14.	A29.3:24
Salisbury, N. C., feeding stations at, regulations concerning cattle transportation at—	
Jan. 3, 1898 .....	A4.5:15
Jan. 9, 1899 .....	A4.5:31
Jan. 20, 1900 .....	A4.5:57

<b>Salmon, Daniel Elmer:</b>	
Address of, before national cattle growers' convention, Kansas City. 1887. p. 7.....	A1.8:43
Animal diseases, some examples of development of knowledge concerning. 1899. p. 93 .....	A1.10:899
same, p. 53 .....	A4.1:899
Animal Industry Bureau, Agriculture Department, work of, for farmer. 1897. p. 236 .....	A1.10:897
same, reprinted. p. 25.....	A4.1:897
Animals, contagious diseases of—	
national legislation for, address on, before 3d national convention of stockmen, Chicago, Nov., 1885. p. 13.....	A1.8:38
prevention of, in America. 1883. p. 32 .....	A1.8:29
Animals and their products, exports of. 1897 .....	A4.4:17
Animals slaughtered for food, necessity of inspecting. 1889. p. 30 .....	A7.3:25
Argentina as a market for pure-bred cattle from United States, preliminary report on. 1902 .....	A4.4:37
Beef supply of United States and export trade in animals and meat products. 1889. p. 64 .....	A1.1:889
same, 1890 .....	A4.2:B39
Black quarter or black leg. p. 84 .....	A4.1:893-4
same, n. d. ....	A4.4:6
Bovine tuberculosis—	
legislation with reference to. 1901.....	A4.3:28
relation of, to public health. 1901.....	A4.3:33
Butter making, recently patented process of.....	A21.2:B97
Federal meat inspection. 1894. p. 67 .....	A1.10:894
Food products from diseased animals. p. 250 .....	A4.1:901
Foot-and-mouth disease, warning to all owners of cattle, sheep, and swine. 1902 .....	A4.4:38
Fowl cholera, prevention of. 1881. p. 314 .....	A1.6:34
same (circular). 1881 .....	A4.2:F82
Hog cholera, inoculation for prevention of, experiments with. 1892 .....	A1.9:8
Hog cholera and swine plague. 1894 .....	A1.9:24
Hog cholera; its history, nature, and treatment, as determined by inquiries and investigations of Bureau of Animal Industry. 1889 .....	A1.8:46
Hog fever, investigation of, in North Carolina. p. 432 .....	A1.1:878
Live stock, foreign and interstate shipments of, Federal inspection of. p. 237 .....	A4.1:901
Lumpy jaw or actinomycosis in cattle, investigations relating to treatment of—	
1893. p. 109 .....	A4.1:891-2
1893 .....	A4.3:2
1894 .....	A4.1:893-4
n. d. ....	A4.4:7
Mexico as market for pure-bred beef cattle from U. S. 1902.....	A4.3:41
Pathological conditions found in meat inspection. p. 52 .....	A4.1:900
Poultry raising on farm. 1901.....	A1.9:141
same, p. 235 .....	A4.1:900
Rabies, its cause, frequency, and treatment. 1900. p. 211.....	A1.10:900
same, p. 122.....	A4.1:900
Rabies in District of Columbia. 1900 .....	A4.4:30
Sheep scab, work against. p. 69.....	A4.1:900
Southern cattle fever, investigation of. 1880. p. 98 .....	A1.6:22
Swine plague, fowl cholera, and southern cattle fever, investigation of. p. 258 .....	A1.1:881-2
Swine plague, investigation of. 1878. p. 321 .....	A1.1:878
Swine plague and fowl cholera, investigation of, second report. 1880. p. 13 .....	A1.6:34
same, p. 387 .....	A1.1:880
Swine plague in North Carolina. 1879. p. 123.....	A1.6:12
Texas cattle fever and fowl cholera, investigation of. 1883. p. 18.	A1.1:883
Trichiniasis, extent of, in America and Europe. p. 475 .....	A4.1:884
same. 1884. p. 269 .....	A4.2:An5



# Index

	Classification no.
Salmon, Daniel Elmer—Continued	
Tuberculin test for tuberculosis. 1901. p. 581 .....	A1.10:901
Tuberculin test of imported cattle. 1901 .....	A4.3:32
Tuberculosis of animals in some of its relations to human tubercu- losis. p. 257 .....	A4.1:901
Wheat as food for growing and fattening animals, n. d .....	A4.4:2
<i>See also</i> , for report as Chief of Veterinary Division, Agriculture Department, 1883; for reports as Chief of Animal Industry Bureau, 1884-1902 .....	A4.1:
Salmon, Daniel Elmer, and Smith, Theobald. Cattle, infectious dis- eases of. p. 371 .....	A4.2:C29 <sup>2</sup>
Salmon, Daniel Elmer, and Stiles, Charles Wardell:	
Cattle ticks (Ixodoidea) of United States. p. 380 .....	A4.1:900
Sheep scab; its nature and treatment. p. 98 .....	A4.1:897
same .....	A4.3:21
Sheep scab, results of work against, in 1901. p. 583 .....	A4.1:901
Surra, emergency report on. p. 41 .....	A4.1:901
same .....	A4.3:42
Salmon ladders, note on. 1867. p. 207 .....	A27.9:5
Salmon propagation in Australia. 1867. p. 207 .....	A27.9:5
Salt:	
Dairy, study of various brands of (Lawson). 1899. p. 28 .....	A1.9:107
Influence of salt and similar substances, on soil moisture (Rea). 1900. p. 5 .....	A1.9:114
Used in packing. p. 491 .....	A4.1:884
same. 1884. p. 288 .....	A4.2:An5
Salt and resin wash. <i>See</i> San Jose scale.	
Salt Lake Valley, Utah. Soils of (Gardner and Stewart). n. d ....	A26.4:4
Same (Gardner and Stewart). 1900. p. 77 .....	A1.8:64
Salt-marsh hay. <i>See</i> Hay.	
Salt-marsh lands, reclamation of (Means). 1901 .....	A26.4:8
Salt marshes, grasses of (Scribner). 1895. p. 325 .....	A1.10:895
Salt River Valley, Arizona:	
Irrigation investigations in, 1900 (Code). 1902. p. 83 .....	A10.3:104
same, 1901 (Code). p. 51 .....	A10.3:119
Soil survey in (Means). p. 287 .....	A26.5:900 <sup>1</sup>
Saltbushes:	
Commercial, seeds of (Collins). 1901 .....	A6.3:27
Report on (Kennedy). 1900 .....	A1.9:108
same (Smith). 1896 .....	A3.4:3
Salted meats. <i>See</i> Meat — Pork.	
Salts:	
Dissolved, influence of, on capillary rise of soil waters (Briggs and Lapham). 1902. p. 5 .....	A26.3:19
Distribution of, in alkali soils (Hilgard). 1896. p. 66 .....	A10.3:30
Influencing rate of evaporation of water from soils (Briggs). 1900. p. 184 .....	A1.8:64
Occurring in alkali soils, solution studies of. 1901 .....	A26.3:18
Salviate, E. de. Dairying, cooperative, in Sweden; translated by A. W. Augerer. 1872. p. 452 .....	A27.9:10
Sammis, J. L. <i>See</i> , as joint author, Grindley, H. S.	
Samuels, Edward A.:	
Birds on farm, value of. p. 201 .....	A1.1:867
Mammalogy and ornithology of New England, with reference to agricultural economy. p. 265 .....	A1.1:863
Oology of some land birds of New England as a means of identi- fying injurious or beneficial species. p. 386 .....	A1.1:864
San Benito Island, Mexico, list of plants collected by Edward Palmer at, in 1889 (Vasey and Rose). 1890. p. 20 .....	A6.5:1
San Bernardino County, Cal., forests of (Kinney). 1888. p. 198 ...	A13.3:2
San Bernardino Valley, Cal., studies of subterranean water supply of, and its utilization (Hilgard). 1902. p. 103 .....	A10.3:119
Sanborn, J. W. Soil physics, relation of tillage to. 1891. p. 97 ...	A10.5:3
Sanborn, T. F. Sorghum-sugar experiments at Medicine Lodge, Kans. 1889. p. 77 .....	A7.3:26
<i>See also</i> , as joint author, Carr, Oma.	



		<b>Index</b>
		<b>Classification no.</b>
<b>Sand:</b>		
Drifting, French experiments in fixing. 1875. p. 520 .....		A27.9:13
Rains of, note on (Abbe). 1899. p. 158.....		A29.6:27
Sand and soil binders, grasses as (Scribner). 1894. p. 421.....		A1.10:894
Sand-binding grasses (Scribner). 1898. p. 405.....		A1.10:898
Sand blizzard, note on (Abbe). 1895. p. 381.....		A29.6:23
Sand cultures, methods of, at Bernburg Experiment Station (Hellriegel). 1895. pp. 749, 835 .....		A10.6:5
Sand dunes and wind, notes on (Abbe). 1901. p. 176 .....		A29.6:29
Sand hills of Nebraska, flora of (Rydberg). 1895. p. 133.....		A6.5:3
Sand vetch. <i>See</i> Vetch.		
Sandberg, J. H. <i>See</i> , as collector, Holzinger, John M.		
<b>Sanders, J. H.:</b>		
Hamburg international exhibition, 1883, report of. p. 371 .....		A4.1:884
same, 1884. p. 181 .....		A4.2:An5
Horse breeding for turf, road, and farm. 1883. p. 229 .....		A1.7:2
Sanders, William R. Sheep, fine-wooled. p. 185.....		A1.1:864
Sanderson, E. Dwight, and Penny, Charles L. Hydrocyanic-acid gas as insecticide on low-growing plants. 1900. p. 60.....		A9.6:26
<b>Sanderson, E. Dwight:</b>		
Aphids of apple, pear, and quince. 1902. p. 123.....		A10.3:115
<b>Delaware—</b>		
entomological notes from. 1902. p. 97 .....		A9.6:37
insects in, notes on. 1900. p. 66.....		A9.6:26
<b>San Diego, Cal.:</b>		
Climatology of, notes on, 1849-99 (Abbe). p. 20 .....		A29.6:28
Waterspout, report on (Carpenter). 1898. p. 545.....		A29.6:26
<b>San Diego County, Cal.:</b>		
Coleoptera observed in, notes on habits of some species of (Blaisdell). 1892. p. 33 .....		A9.7:5
Forests of (Kinney). 1888. p. 198.....		A13.3:2
Trees and shrubs of. 1888. p. 202 .....		A13.3:2
Sandwich Island sugar-cane borer. 1888. p. 185.....		A9.7:1
<b>San Francisco, Cal.:</b>		
Climate of (McAdie). 1899 .....		A29.3:28
Coccidæ, some found by Alex. Craw in course of his quarantine work at. 1896. p. 42 .....		A9.8:4
Kites at, experiments with (Hammon). 1896. p. 288.....		A29.6:24
Meteorological observations of, 1893-94 (Featherstone). p. 128..		A29.6:22
Port of, scale insects found upon plants entering, list of (Craw)..		A9.8:4
Precipitation at, 1889-91. p. 108 .....		A29.6:20
Trade of, in agricultural products, 1864-65. No. 6. p. 28.....		A27.9:3
Trade with. 1867. p. 373 .....		A27.9:5
<b>Weather forecast district, report of—</b>		
Feb., March, 1899 (Willson) .....		A29.6:27
Apr.-July, Sept., 1899-July, 1900 (McAdie).....		A29.6:
Sept., Oct., 1900 (Willson) .....		A29.6:28
Nov., 1900-July, 1901 (McAdie) .....		A29.6:
Sept.-Nov., 1901 (McAdie) .....		A29.6:29
Jan.-Oct., 1902 (McAdie) .....		A29.6:30
<b>San Francisco mountain region:</b>		
<b>Arizona—</b>		
biological survey of, results of (Merriam). 1890 .....		A5.5:3
forest trees of (Merriam). 1890. p. 119 .....		A5.5:3
Reptiles and batrachians of (Stejneger). 1890. p. 103 .....		A5.5:3
San Gabriel area, California, soil survey of (Holmes and Mesmer). p. 559 .....		A26.5:901
Sanger, J. P., address of, before convention of National League for Good Roads, Washington. 1893. p. 69 .....		A10.3:14
Sanitary climatology circulars .....		A29.15:
<b>Sanitary officials, list of:</b>		
1898. p. 616 .....		A1.10:898
1899. p. 698 .....		A1.10:899
1900. p. 653 .....		A1.10:900
1901. p. 628 .....		A1.10:901
Sanitary significance of forests (Fernow). 1893. p. 171.....		A13.3:7

# Index

## Classification no.

San Jacinto River, Cal., problems of water storage on torrential streams of southern California as typified by (Schuyler). 1901. p. 353 .....	A10.3:100
San Joaquin County, California, resources of (Holden). 1868. p. 363.	A27.9:6
San Joaquin River, Cal., irrigation from (Soulé). 1901. p. 215 .....	A10.3:100
San Joaquin Valley, California, locusts of (Coquillett). p. 289 .....	A1.1:885
San Jose or pernicious scale:	
<i>Aphelinus fuscipennis</i> , an important parasite upon, in Eastern United States (Johnson). 1900. p. 73 .....	A9.6:26
Charlottesville, Va. (Schwarz). 1894. p. 247 .....	A9.7:6
Connecticut (Britton). 1898. p. 81 .....	A9.6:17
Cooperation for control of, is it practicable? (Alwood). 1896. p. 80 .....	A9.6:6
Dried fruit (Howard). 1898. p. 7 .....	A9.6:18
Eastern United States, appearance in, and measures taken to prevent its spread and to destroy it (Howard). 1893 .....	A9.5:3
same (Howard). 1894. p. 153 .....	A9.7:7
Experimental work in New York State against (Felt). 1902. p. 35.	A9.6:37
Experiments with winter washes against, season of 1894-95 (Marlatt). 1895. p. 365 .....	A9.7:7
How to control, circular on (Marlatt) .....	A9.5:42
Hydrocyanic-acid gas as remedy for (Johnson). 1898. p. 39 .....	A9.6:17
Insecticides for, various, some practical experiments with, in Georgia (Scott). 1902. p. 41 .....	A9.6:37
Japan, preliminary report on (Marlatt). 1902. p. 41 .....	A9.6:31
Lime, sulphur, and salt and resin washes for, use of, in Ohio (Burgess). 1902. p. 33 .....	A9.6:37
same, in Maryland (Quaintance). 1902. p. 37 .....	A9.6:37
Michigan, present status in (Barrows). 1897. p. 27 .....	A9.6:9
Native home of, résumé of search for, in Japan and China (Marlatt). 1902. p. 65 .....	A9.6:37
New Jersey (Smith)—	
1894. p. 163 .....	A9.7:7
1898. p. 32 .....	A9.6:17
Notes on (Howard). 1895. p. 283 .....	A9.7:7
Occurrences in United States, with full account of its life history and remedies to be used against it (Howard and Marlatt) .....	A9.6:3
Original home of (Howard and Marlatt). 1899. p. 36 .....	A9.6:20
Report on—	
1894. p. 360 .....	A9.7:6
1896-97 (Howard) .....	A9.6:12
Virginia (Coquillett), 1894. p. 253, 324 .....	A9.7:6
San Jose scale and its nearest allies (Cockerell). 1897 .....	A9.8:6
San Juan, Porto Rico, temperature, rainfall, and humidity at (Phillips). 1899. p. 319 .....	A29.1:898
San Mateo (Cal.) Agricultural Association fair, cattle exhibited at, special order concerning. Aug. 18, 1900 .....	A4.5:69
San Pedro Martin Island, plants collected at, by Edward Palmer in 1890, list of (Vasey and Rose). 1890. p. 78 .....	A6.5:1
Sanpete County, Utah, soil survey in (Means). 1900. p. 115 .....	A1.8:64
Santa Agueda, Lower California, plants collected by Edward Palmer in 1890 at, list of (Vasey and Rose). 1890. p. 80 .....	A6.5:1
Santa Ana, Cal., soil survey around (Holmes). p. 385 .....	A26.5:900 <sup>1</sup>
Santa Barbara, California, climate of. 1871. p. 196 .....	A27.9:9
Santa Rosalia, Lower California, plants collected by Edward Palmer in 1890 at, list of (Vasey and Rose). 1890. p. 80 .....	A6.5:1
Santillan, Rafael Aquilar y. See Aquilar y Santillan, Rafael .....	
Santo Domingo, plants from. 1870. p. 283 .....	A27.9:8
Sap, circulation of (Vasey). 1874. p. 151 .....	A27.9:12
Sapindaceæ, three new species of, from western Mexico and Lower California (Radlkofer). 1893. p. 367 .....	A6.5:1
<i>Sarcopsylla gallinacea</i> . See Hen flea.	
Sarcoptidæ, parasitism among, origin and development of (Garman). 1891. p. 182 .....	A9.7:4
Sarcosporidia, presence of, in birds (Stiles). 1893. p. 79 .....	A4.3:3
Sargent, A. A. Viticulture in California. 1882. p. 157 .....	A1.8:22
Sargent, C. S. Rainfall and charts of rainfall. 1902. p. 227 .....	A29.6:30

Sartori, Giuseppe. Dubernard method for examination of butter. 1890. p. 103 .....	A7.3:24
Sausages, United States, in Gibraltar (Sprague). p. 519 .....	A4.1:899
Sausalito, California, storm wave at (Abbe). 1895. p. 424 .....	A29.6:23
Saunders, William:	
Cranberry culture. 1894.....	A1.9:13
Economic plants in collection of Agriculture Department, catalogue of. 1891 .....	A1.8:47
Experimental Gardens and Grounds Office, Agriculture Department, work of, for farmer. 1897. p. 180 .....	A1.10:897
Garden, notes of the—	
1871. p. 476 .....	A27.9:9
1872. p. 72 .....	A27.9:10
Grapevine, pruning and training, remarks on, with quotations and illustrations from various authors. p. 97 .....	A1.1:866
Horticulture and kindred subjects, papers on. 1891 .....	A1.8:48
Participation of Agriculture Department in Philadelphia International Exhibition. 1876 .....	A1.2:P53
Plants, bulbs, tubers, etc., for distribution from U. S. propagating garden, catalogue of, with report on object and aims of garden. 1862 .....	A1.8:2
Plants in exotic collection of Department of Agriculture, descriptive catalogue of. 1872 .....	A1.8:6
Pruning of trees and other plants. 1898. p. 151 .....	A1.10:898
Soils and products of Florida, observations on. 1883 .....	A1.6:62
Tea culture, experiment in, report on tea gardens of Dr. Charles U. Shepard, Pinehurst, S. C. 1897 .....	A14.4:1
Tea culture as a probable American industry. 1879.....	A1.6:18
Tea garden, Government, at Summerville, S. C., condition and prospects of. p. 28 .....	A1.1:881-2
<i>See also</i> , for reports as Superintendent of Experimental Garden, 1862-1867; and as Superintendent of Gardens and Grounds, 1868-1899 .....	A14.1:
Saunders, William, sketch of life of (Hill). 1900. p. 625.....	A1.10:900
Saw-fly:	
Dogwood, report on. 1890. p. 239.....	A9.7:2
New, which is injurious to hollyhocks (Cockerell). 1894. p. 251.....	A9.7:7
Rose, in United States (Riley). 1892. p. 6.....	A9.7:5
Strawberry (Malley). 1889. p. 136.....	A9.7:2
Sweet potato, report on. 1888. p. 43 .....	A9.7:1
same, new (Marlatt). 1892. p. 24 .....	A9.7:5
Wheat and grass, notes on (Riley and Marlatt). 1891. p. 168 ..	A9.7:4
Willow-shoot, report on (Riley). 1888. p. 8.....	A9.7:1
<i>See also</i> Cimex — Harpiphorus maculatus — Monostegia ignota — Nematinae — Pear slug — Sweet potato saw-flies — Wheat saw-flies.	
Saxony:	
Beef and pork in, consumption of. 1887. p. 591 .....	A27.9:25
Statistics of. 1876. p. 496.....	A27.9:14
Tuberculosis among cattle in. p. 99 .....	A4.1:893-4
Saylor, Charles F.:	
Beet-sugar industry of United States, report as special agent—	
1897 .....	A1.2:B39 <sup>2</sup>
same. p. 161 .....	A1.2:B39 <sup>1</sup>
1898. p. 13 .....	A1.2:B39 <sup>4</sup>
1900. p. 5 .....	A1.8:69
1901. p. 9 .....	A1.8:72
1901. p. 487 .....	A1.10:901
Scabies. <i>See</i> Cattle — Sheep scab.	
Scale. <i>See also</i> Red scale.	
Scale insects:	
American fruit imported into Germany (Reh). 1900. p. 79 ....	A9.6:22
California, report for 1891 (Coquillett). p. 13.....	A9.3:26
Destroying, various methods for, report on (Coquillett)—	
1888. p. 123.....	A1.1:888
same. p. 123.....	A9.1:888
1890. p. 19 .....	A9.3:23

# Index

	Classification no.
<b>Scale insects—Continued</b>	
Enemies in California (Smith). 1896. p. 46.....	A9.6:6
Enemy of citrus trees (Marlatt). 1900. p. 247.....	A1.10:900
Experiments against (Koebele). p. 143.....	A1.1:887
Experiments on, progress in, etc. (Hubbard). p. 152.....	A1.1:883
same. p. 152.....	A9.1:883
Found upon plants entering port of San Francisco, list of (Craw), 1896. p. 40.....	A9.8:4
Gas treatment for, report on (Coquillett)—	
1887. p. 123.....	A1.1:887
same. p. 35.....	A9.3:15
1890. supplementary. p. 41.....	A9.7:1
Hydrocyanic acid gas treatment for, history of (Coquillett). 1891. p. 457.....	A9.7:3
Important, two, parasites of (Howard). 1894. p. 5.....	A9.7:7
Injurious, danger to American horticulture from introduction of (King). 1901. p. 171.....	A10.3:99
New, from California (Coquillett). 1891. p. 382.....	A9.7:3
New and old, notes on (Johnson). 1896. p. 74.....	A9.6:6
Report of Entomologist on. p. 276.....	A1.1:880
Some, of orchard (Howard). 1894. p. 249.....	A1.10:894
Temperature control of (Marlatt). 1899. p. 73.....	A9.6:20
Useful American (Howard). 1897. p. 38.....	A9.6:9
<i>See also</i> Aleurodidæ — Aleyrodes — Aspidiotus ostreaformis — Blackscale — Coccidæ — Coccids — Cottony cushion-scale — Date-palm scale — Eimeria stiedæ — Eimeriella — Fluted scale — Icerya — Jamaican coccidæ — Japanese coccidæ — Lecanium — Maple pseudococcus — Mytilaspis pomorum — Orange — Peach lecanium — Peach-tree scale — Red scales — San José scale.	
<b>Scandinavia:</b>	
Agricultural education in, notes on (Woll). 1897. p. 7.....	A10.4:32
same (Woll). 1898. pp. 605, 703.....	A10.6:9
Our trade with, 1890–1900 (Hitchcock). 1900.....	A12.3:22
Seed-control stations in, report on (Woll). 1899. p. 4.....	A10.6:10
Scatchkow, K. Locusts in China, extermination of. 1883. App., p. 65.....	A8.1:3
Scelle, Ch. Egg sales of Paris, 1896; translated by Newton B. Ashby. p. 339.....	A4.1:899
Scepsis edwardsii, preparatory stages of (Dyar). 1890. p. 360.....	A9.7:2
Scheffer, Theo H. Twig girdler, notes and observations on. 1895. p. 345.....	A9.7:7
Schickler, C. Pomology in Wurtemberg. 1870. p. 153.....	A27.9:8
Schippis, K. Halo phenomena, observation of. 1897. p. 294.....	A29.6:25
Schizoneura panicola thos. and S. corni fab. identity of (Osborn). 1889. p. 108.....	A9.7:2
Schloesing's method. <i>See</i> Nitric acid in soils.	
Schmidberger, —. Pear midge, habits of. p. 286.....	A1.1:885
Schmoeger-Neubert. Estimation of content of fat in milk by method of (Kühn). 1890. p. 158.....	A7.3:24
Schokalsky, Jules de. Ladoga Lake, from thermic point of view. 1901. p. 63.....	A29.6:29
School books, errors in, notes on (Abbe). 1900. p. 16.....	A29.6:28
<b>Schools:</b>	
Arbor Day observance in (Northrop). p. 27.....	A1.8:56
Bird day in.....	A5.4:17
Common—	
agriculture in. 1868. p. 92.....	A27.9:6
same (Adams). 1885. p. 174.....	A1.7:9
as affected by roads (Abercrombie). 1902. p. 39.....	A22.3:23
Meteorology and relation of (Kimball). 1902. p. 131.....	A29.6:30
Meteorology in (Abbe). 1894. p. 512.....	A29.6:22
same. 1899. p. 469.....	A29.6:27
Primary work on meteorology for use of (Connor). 1899. p. 102.	A29.3:24
<b>Public—</b>	
how may farmers' organizations hasten teaching of agriculture in? (Voorhees). 1902. p. 89.....	A10.3:120

<b>Schools—Continued</b>	
Public—Continued	
meteorological observations at, notes on (Abbe). 1899. p. 550 .....	A29.6:27
same (Wilkinson). 1899. p. 550 .....	A29.6:27
meteorology in (Abbe). 1896. p. 458 .....	A29.6:23
same (Abbe). 1897. p. 17 .....	A29.6:25
teaching agriculture in (James). 1902. p. 84 .....	A10.3:120
Rural—	
agriculture in (Powell). 1902. p. 109 .....	A10.3:120
grounds of, tree planting on (Hall). 1901 .....	A1.9:134
Technical, mechanical, drawing in (Flather). 1894. p. 81 .....	A10.3:20
<i>See also</i> Agricultural colleges—Technical schools—Welch, A. S.	
Schott, Charles Anthony:	
Magnetic survey of North America. 1895. p. 460 .....	A29.3:11 <sup>2</sup>
Rainfall and charts of rainfall. 1902. p. 241 .....	A29.6:30
Schöyen, W. M. Insects of Norway and Sweden, notes on. 1897. p. 79 .....	A9.6:9
Schreiber, Paul:	
Meteorological observations considered with special reference to influence on vegetation. 1895. p. 395 .....	A29.3:11 <sup>2</sup>
Rainfall and charts of rainfall. 1902. p. 237 .....	A29.6:30
Schrenk, Hermann von:	
Catalpa, hardy, diseases of. 1902. p. 49 .....	A13.3:37
Fungous diseases of forest trees. 1900. p. 199 .....	A1.10:900
New England conifers, some diseases of. 1900 .....	A28.3:25
Red cedar, two diseases of, caused by <i>Polyporus juniperinus</i> n. sp. and <i>Polyporus carneus</i> nees, preliminary report. 1900 .....	A28.3:21
Timber, decay of, and methods of preventing it. 1902 .....	A19.3:14
Schrodt, M. Specific gravity of cow's milk, limits of. 1888. p. 154 .....	A7.3:24
Schroeder, Ernest C.:	
Blood and serum injections in connection with Texas fever investigations, experiment in. p. 43 .....	A4.1:899
Bottom disease among horses of South Dakota. p. 371 .....	A4.1:891-2
Inoculation to produce immunity from Texas fever in northern cattle. p. 273 .....	A4.1:898
Southern cattle tick, vitality of. p. 41 .....	A4.1:899
Texas fever organism, persistence of, in blood of cattle. p. 42 .....	A4.1:899
Tubercle bacilli in milk of cows, experimental observations on presence of. 1894. p. 75 .....	A4.3:7
Tuberculosis, prevalence of, among cattle in New York State. p. 66 .....	A4.1:893-4
<i>See also</i> , as collaborator, De Schweinitz, Emil Alexander; as joint author, Kilborne, F. L.—Smith, Theobald.	
Schroeder, Ernest C., and Cotton, W. E. Southern cattle ticks, growing noninfected and afterwards infecting them with Texas fever. p. 33 .....	A4.1:899
Schulte, J. I.:	
Grains, tillering of. 1899. p. 10 .....	A1.9:105
Tobacco, work of agricultural experiment stations, with introduction and comments by Milton Whitney. 1900 .....	A1.8:63
Schultz, L. G. Sky polarization, study of, with reference to weather conditions. 1902. p. 28 .....	A29.3:31
Schuster, Arthur:	
Mathematical analysis as applied to terrestrial magnetism, present condition of. 1895. p. 550 .....	A29.3:11 <sup>2</sup>
Meteorology, address on, at British Association, Belfast. 1902. p. 448 .....	A29.6:30
Schuyler, James D. Water storage, problems of, on torrential streams of southern California as typified by Sweetwater and San Jacinto rivers. 1901. p. 353 .....	A10.3:100
Schuyler, Nebr., Sugar-beet Experiment Station, annual report of:	
1891 (Maxwell). p. 118 .....	A7.3:33
1892. p. 43 .....	A7.3:37
1894. p. 37 .....	A7.3:39
Schwarz, Eugene Amandus:	
Cicada, periodical, in 1897, circular on .....	A9.5:22
same. 1898 .....	A9.5:30



# Index

	Classification no.
Schwarz, Eugene Amandus—Continued	
Cotton-worm question in 1894. p. 315 .....	A9.7:7
Crow, insect food of. 1895. p. 57 .....	A5.3:3
Eumæus atala, notes on. 1888. p. 37 .....	A9.7:1
Hippelates plague in Florida. 1895. p. 374 .....	A9.7:7
Hylesinus sericeus, notes on. 1894. p. 254 .....	A9.7:7
Insects living on or injurious to the cotton plant in Bahama Islands. 1878. p. 347 .....	A9.2:C82
Library pest, imported, report of. 1895. p. 396 .....	A9.7:7
Red-legged flea-beetle, its injuries to orchard trees in Maryland and Virginia. 1893. p. 334 .....	A9.7:5
San Jose scale at Charlottesville, Va. 1894. p. 247 .....	A9.7:6
See also, as translator, Reh, L.	
Schweinitz, Emil Alexander, de. See De Schweinitz.	
Schweitzer, Paul, and Fox, Charles P. Meat analysis—testing of apparatus and method. 1891. p. 40 .....	A7.3:31
Schwolson, Orest. Solar radiation, observations of; how best made and compiled. 1896. p. 721 .....	A29.3:11 <sup>2</sup>
Science:	
Applied, as a factor of rural production. 1885. No. 20. p. 31 ..	A27.9:23
Poetry (Abbe). 1902. p. 269 .....	A29.6:30
True relations of, to industries and arts (Wiley). p. 32 .....	A1.7:2
Versus art (Roberts). 1898. p. 69 .....	A10.3:49
Scientific investigation, original, under certain conditions advisability of supplying employees of Weather Bureau with apparatus for carrying on (Fulton). 1902. p. 22 .....	A29.3:31
Scientific investigators, training needed to become, notes on (Abbe). 1901. p. 447 .....	A29.6:28
Scientific organizations, relations of weather officials with, how promoted (Beals). 1899. p. 69 .....	A29.3:24
Same (Sims). 1899. p. 74 .....	A29.3:24
Scientific research, instruction in, notes on (Abbe). 1898. p. 413 ..	A29.6:26
Scientific work of Agriculture Department, recommendation for appointment of director in chief of, etc .....	A1.2:Scil
Scleroderma, genus, in Saccardo's Sylloge (Ellis). 1889. p. 23 .....	A28.5:5
Scofield, Carl S. Algerian durum wheats, classified list, with descriptions. 1902 .....	A19.3:7
Scolytidæ and their food plants, notes on (Blandford). 1894. p. 260 ..	A9.7:6
Scolytids, destructive, and their imported enemy (Hopkins). 1893. p. 123 .....	A9.7:6
Scoresby, Wm., jr. Meteorological notes by, report on (Abbe). 1897. p. 62 .....	A29.6:25
Scorpions, report on. 1894. p. 260 .....	A9.7:7
Scotland:	
Agriculture and dairying in (Higgins). p. 213 .....	A4.1:898
Cattle in, pleuro-pneumonia in (Reid). p. 401 .....	A4.1:889-90
Dog tax in. 1867. p. 381 .....	A27.9:5
Fiber in, determination of (Aitken). 1894. p. 172 .....	A7.3:43
Wheat experiments in. 1866. p. 386 .....	A27.9:4
See also Ben Nevis observatory — Edinburgh.	
Scott, John. Beef, breeding and feeding for, and supplying market. 1889. p. 132 .....	A1.7:2
Scott, Martin P. Lawes's views of fertility. 1883. p. 76 .....	A1.7:2
Scott, Robert H.:	
Paris, international meteorological conference at. Sept., 1896. p. 333 .....	A29.6:24
Weather maps and bulletins, daily, publication of. 1894. p. 6 ..	A29.3:11 <sup>1</sup>
Scott, Robert W. Kentucky sheep, improved. p. 334 .....	A1.1:866
Scott, W. H. College faculty meetings. 1895. p. 80 .....	A10.3:24
Scott, W. M.:	
Aphis, new species of, injurious to plums and peaches in Georgia, preliminary note on. 1902. p. 56 .....	A9.6:31
Coccidæ of Georgia, notes on. 1900. p. 49 .....	A9.6:26
Georgia, coccids in, fatal temperature for some. 1899. p. 82 .....	A9.6:20
San Jose scale, some practical experiments with various insecticides for, in Georgia. 1902. p. 41 .....	A9.6:37



Scott, W. M., and Fiske, W. F. Curculio, jarring for, on extensive scale in Georgia, with list of insects caught. 1902. p. 24.....	A9.6:31
Scovel, J. V. H. Potatoes, experiments with. 1874. p. 331 .....	A27.9:12
Scovell, Melville Amasa:	
Address of, as president of Association of Official Agricultural Chemists, at seventh annual convention. 1890. p. 6 .....	A7.3:28
Burley tobacco, its growing and curing. 1901. p. 106.....	A10.3:99
Cows, testing as to milk and butter production, some notes in connection with. 1899. p. 123 .....	A10.3:65
Dairy tests at World's Columbian Exposition, report of committee on. 1894. p. 52 .....	A10.3:20
Kjeldahl method applicable to determination of nitrogen in nitrates. 1887. p. 51.....	A7.3:16
<i>See also, as collaborator, Wiley, Harvey Washington.</i>	
Scovell, Melville Amasa, Peter, Alfred Meredith, and Curtis, H. E. Fertilizers, potash in, report on some sources of error in determination of. 1896. p. 42 .....	A7.3:49
Screech owl. <i>See Owl.</i>	
Screw worm, hominivorous habits of, in St. Louis, Mo. (Murtfeldt). 1891. p. 200 .....	A9.7:4
Screws, W. W. Address of, before national road conference, July, 1894. p. 23 .....	A22.3:10
Scribner, Frank Lamson:-	
Agrostology, economic and scientific, progress of. 1899. p. 347..	A1.10:899
Agrostology Division, Agriculture Department—	
publications of, list of. 1901.....	A3.4:36
work of, for farmer. 1897. p. 160.....	A1.10:897
American grasses, report on.....	A3.3:7
same, pt. 2 .....	A3.3:17
same, pt. 3 .....	A3.3:20
Economic grasses .....	A3.3:14
Flat pea, circular on. 1895.....	A6.4:4
same. 1899 .....	A3.4:11
Fungicides, or remedies for plant diseases. 1888 .....	A28.4:5
Fungous diseases of plants, outlines of certain, with remarks upon application of remedies. p. 76.....	A1.1:885
Giant knotweed, or sachaline, circular on. 1895.....	A6.4:5
Grapevine—	
black-rot and brown-rot of, extent, severity, and treatment of, in northern Ohio, in 1889. p. 76 .....	A6.3:11
fungus diseases of. 1886 .....	A6.3:2
downy mildew and black-rot of, experiments made in treatment of, 1887, with chapter on apparatus for applying remedies for these diseases.....	A6.3:5
same. 1888 .....	A6.3:10
Grass gardens. 1895. p. 301.....	A1.10:895
Grasses—	
Acapulco, Mexico, collected by Dr. E. Palmer in vicinity of, list of. 1897. p. 7.....	A3.3:4
as sand and soil binders. 1894. pp. 421, 580 .....	A1.10:894
in Elliott's "Sketch of Botany of South Carolina and Georgia," notes on. 1901 .....	A3.4:29
new or little known, description of—	
1897. p. 5 .....	A3.3:8
1898. p. 42 .....	A3.3:11
1901 .....	A3.4:30
of salt marshes. 1895. p. 325.....	A1.10:895
useful and ornamental. 1896.....	A3.3:3
Hairy vetch, sand vetch, or Russian vetch. 1895.....	A3.4:2
Hungarian brome grass, circular on. 1894.....	A6.4:1
Ixophorus, genus. 1897. p. 5.....	A3.3:4
Lawns and lawn making. 1897. p. 355.....	A1.10:897
Mexican grasses, new or little known. 1899 .....	A3.4:19
North American grasses, new species of. Feb., 1899.....	A3.4:9
same, June, 1899 .....	A3.4:16
Pacific coast, grass and forage plant investigations on. 1899 .....	A3.4:22
Pasture plants, our native. 1900. p. 581.....	A1.10:900

# Index

	Classification no.
Scribner, Frank Lamson—Continued	
Potato and tomato, treatment of, for blight and rot. 1897 .....	A28.4:4
Range grass and forage plant experiments, cooperative, at High- more, S. Dak. 1899.....	A3.4:21
same. 1900 .....	A3.4:33
Sand-binding grasses. 1898. p. 405.....	A1.10:898
Seed distribution, records of, and cooperative experiments with grasses and forage plants. 1902.....	A19.3:10
Southern forage plants. 1899.....	A1.9:102
See also, for reports as Agrostologist, Agrostology Division, Agri- culture Department, 1895-1901 .....	A3.
See also, for report as Chief, Vegetable Pathology Section, Agri- culture Department, 1887 .....	A28.1:
See also, for report as Mycologist, Agriculture Department, 1886....	A28.1:
Scribner, Frank Lamson-, and Ball, Carleton R. Grasses, miscel- laneous notes and descriptions of new species. 1900. p. 39.....	A3.3:24
Scribner, Frank Lamson-, and Merrill, Elmer D.:	
Calamovilfa, notes on. 1901. p. 2.....	A3.4:35
Chaetochloa, North American species of. 1900 .....	A3.3:21
Grasses of herbarium of Dr. H. Muhlenberg. 1900.....	A3.4:27
Mexican grasses, some recent collections of. 1900. p. 5.....	A3.3:24
Panicum, three new species of. 1901. p. 3.....	A3.4:35
Panicum nitidum, Panicum scoparium, and Panicum pubescens, notes on. 1900. p. 31.....	A3.3:24
Scribner, Frank Lamson-, and Smith, Jared Gage:	
Hordeum and Agropyron, genera, native and introduced species of. 1897. p. 23.....	A3.3:4
Mexican grasses collected by E. W. Nelson in Mexico, 1894-95. 1897. p. 11.....	A3.3:4
Scribner, Frank Lamson-, and Viala, Pierre. Black rot of grapevine. 1888.....	A6.3:7
Scudder, Samuel H. Cranberry girdler, report on. 1894. p. 1 ....	A9.7:7
Scuppernong wine, analysis of (Page). 1868. p. 362.....	A27.9:6
Scymnus:	
Australian, established and described in California (Riley). 1892. p. 127 .....	A9.7:5
Two new species of (Sharp). 1889. p. 364.....	A9.7:1
Sea:	
Ball lightning at, instance of (Seyboth). 1901. p. 249.....	A29.6:29
Earthquake at (Abbe). 1895. p. 380.....	A29.6:23
Effect of proximity to, on thunderstorm periods (Stearns). 1898. p. 452 .....	A29.6:26
Temperature and shore climate (Abbe). 1902. p. 314.....	A29.6:30
Seacoast telegraph lines, instructions to operators on (Bugbee). 1892.	A29.12:Sel <sup>1</sup>
Same (Robinson). 1897 .....	A29.12:Sel <sup>2</sup>
Seaman, William Henry. Fibers, identification of. 1897. p. 352 ..	A11.5:9
Searchlight:	
Use of, in meteorology (Abbe). 1897. p. 206.....	A29.6:25
Weather signals (Calvert). 1898. p. 58 .....	A29.6:26
Seasonal forecasts:	
India and America (Abbe). 1898. p. 266.....	A29.6:26
Long range, for Pacific Coast States (Ashley). 1901. p. 16.....	A29.6:29
Oregon, note on (Abbe). 1898. p. 253 .....	A29.6:26
Seasons:	
Good and bad, periodicity of (Abbe). 1896. p. 290.....	A29.6:24
Natural phenomena of, connection with agriculture (Russell). p. 329 .....	A1.1:864
Warm and cold, normal, relative duration of, notes on (Abbe). 1901. p. 74 .....	A29.6:29
same (Pennywitt). 1901. p. 55.....	A29.6:29
Seaweed, valuable agricultural resource of northern coast regions (Beal). 1899. p. 5.....	A1.9:105
Sebago Lake, Maine, temperature of water of (Abbe). 1894. p. 507..	A29.6:22
Sebelien, J. Albuminoids in milk, estimation of. 1889. p. 169....	A7.3:24
Sedgwick, T. F.:	
Chickens and their diseases in Hawaii. 1901 .....	A10.9:1
Root rot of taro. 1902 .....	A12.9:2

	<b>Index</b>
	<b>Classification no.</b>
<b>Seed and Plant Introduction:</b>	
Section of, Agriculture Department, circular relative to (Cook). 1899.....	A6.4:16
Work of Agriculture Department in, since 1897 (Smith). 1901. p. 145 .....	A10.3:99
Seed coats of certain species of genus Brassica (Pieters and Charles). 1901 .....	A6.3:29
<b>Seed-control stations:</b>	
Establishment of (Burchard). 1893. pp. 793, 882.....	A10.6:4
Scandinavian, report on (Woll). 1899. p. 4.....	A10.6:10
Seed Division, Agriculture Department.....	A24.
Seed wheat for Northwest, correspondence on. 1868. p. 285.....	A27.9:6
<b>Seeds:</b>	
Abstracts of reports of agricultural experiment stations on, 1889-1902 .....	A10.6:
Adulteration of. 1869. p. 146 .....	A27.9:7
Agricultural—	
standards of the purity and vitality of (Hicks). 1896.....	A6.4:6
where grown and how handled (Pieters). 1901. p. 233.....	A1.10:901
Agriculture Department—	
experiments with. 1870. p. 476 .....	A27.9:8
tests of. 1869. p. 242.....	A1.1:869
same. 1870. p. 83 .....	A27.9:8
Beardless brome grass (Pieters). 1900.....	A6.4:25
Commercial saltbushes (Collins). 1901 .....	A6.3:27
Contract for, award of. 1896.....	A1.4:1
Distribution of—	
circulars relative to, July 25, 1895 .....	A1.2:Se3
records of, and cooperative experiments with grasses and forage plants (Scribner). 1902.....	A19.3:10
special agents for, annual report.....	A24.5:
Effect of naphthaline on (Taylor). 1883 .....	A18.2:N16
Experiments with (Baker). 1870. p. 25 .....	A27.9:8
same (Bidwell). p. 24 .....	A27.9:8
Farm and garden, experiments with. 1869. p. 292.....	A27.9:7
Field—	
experiments with. p. 405.....	A1.1:868
production of. 1864. No. 6. p. 16 .....	A27.9:2
selection of, importance of. 1898. p. 8 .....	A1.9:84
Flax culture for, in Europe and America (Dodge). 1898.....	A11.5:10
Free importation of. 1868. p. 62 .....	A27.9:6
Germination of, as affected by certain chemical fertilizers (Hicks). 1900 .....	A6.3:24
Good, farmers' interest in (Pieters). 1900 .....	A1.9:111
Growers of, bees of great value to (Benton). 1892. p. 254 .....	A9.7:4
Investigation, object and methods of (Burchard). 1893. pp. 793, 882 .....	A10.6:4
Large, heavy, superior value of (Hicks and Dabney). 1896. p. 305.....	A1.10:896
Maturing, localities best suited to (Henderson). p. 572.....	A1.1:878
Novelties and specialties in, distribution of .....	A19.5:
Planting by birds (Barrows). p. 280 .....	A1.1:890
same. p. 280.....	A5.1:890
Production and saving (Pieters). 1896. p. 207 .....	A1.10:896
Purchase and distribution, report of Assistant Secretary of Agriculture on—	
1898. p. 1 .....	A1.1:898
1899. p. 3 .....	A1.1:899
1900. p. 7 .....	A1.1:900
Pure, investigation (Hicks). 1894. p. 389.....	A1.10:894
Rescue grass and chess (Hillman). 1902.....	A19.3*:R31
Selection and planting of (Hallett). 1874. p. 381.....	A27.9:12
Selection of—	
importance of (Dupont). 1873. p. 553.....	A27.9:11
same. 1898. p. 7 .....	A1.9:73
report on (Coville). 1898.....	A6.2:P69
work at Medicine Lodge, Kansas, résumé of (Carr). 1893. p. 28.	A7.3:40

# Index

	Classification no.
Seeds—Continued	
Selling, growing, and testing of (Pieters). 1899. p. 549 .....	A1.10:899
Sowing of, brief instructions on. 1873 .....	A1.2:Se3 <sup>s</sup>
Testing—	
additional notes on (Hicks and Key). 1897. p. 441 .....	A1.10:897
at home (Pieters). 1895. p. 175 .....	A1.10:895
methods of, and their relation to farm and garden (Pieters). 1900. p. 55 .....	A10.3:76
rules and apparatus for. 1897 .....	A10.4:34
Treated with carbon bisulphid, vitality of (Hicks and Dabney). n. d. ....	A6.4:11
Treatment of, with copper sulphate to prevent attacks of fungi (Evans). 1896 .....	A28.3:10
Vitality of, effects of certain fungicides upon (Crozier). 1891. p. 8 .....	A28.5:6
<i>See also</i> Cotton seed — Grass seeds — Kentucky bluegrass seed — Linseed — Oil-producing seeds — Red clover seed — Saccha- rine sorghums.	
Seeds and plants:	
Foreign—	
collected in Austria, Italy, and Egypt, by Barbour Lathrop and David G. Fairchild for Section of Seed and Plant Intro- duction, Agriculture Department. 1900 .....	A6.6:6
imported by Section of Seed and Plant Introduction, Agricul- ture Department—	
Nos. 1-1000, n. d. ....	A6.6:1
Nos. 1001-1900. 1899 .....	A6.6:2
Nos. 1901-2700. 1899 .....	A6.6:5
Nos. 2701-3400. 1900 .....	A6.6:7
Imported, inventory no. 9 .....	A19.3:5
Seeley, Dewey A. Temperature of soil and surface of ground. 1901. p. 501 .....	A29.6:29
Seiches and mirobia, notes on (Abbe):	
1898. p. 562 .....	A29.6:26
1899. p. 102 .....	A29.6:27
Seidell, Atherton. Alkali soils, chemical examination of. 1901. p. 65 .....	A26.3:18
<i>See also</i> , as joint author, Cameron, Frank K.	
Seismic changes, small, caused by building operations (Marvin). 1899. p. 582 .....	A29.6:27
Seismic noises:	
North Carolina and Georgia (Hawkins). 1897. p. 393 .....	A29.6:25
Notes on (Abbe). 1898. pp. 216, 562 .....	A29.6:26
Report on (Kain and others). 1898. p. 152 .....	A29.6:26
Seismograph:	
Marvin, report on (Marvin). 1895. p. 250 .....	A29.6:23
Meteorological stations (Abbe). 1897. p. 259 .....	A29.6:25
Milne, records by (Abbe). 1899. p. 214 .....	A29.6:27
Observatory, Carson City, Nev. (Friend). 1900. p. 245 .....	A29.6:28
Stations in United States, notes on (Abbe). 1899. p. 310 .....	A29.6:27
Seismometers in meteorology, notes on (Abbe). 1901. p. 420 .....	A29.6:29
Selby, A. D. Garden herbarium, making and its uses. 1900. p. 92 .....	A10.3:76
Selenium and its use for measurement of sunshine (Dorsey). 1899. p. 99 .....	A29.6:27
Semaquir, notes on (Abbe). 1898. p. 65 .....	A29.6:26
Semiarid districts, wheat growing in, successful (Carleton). 1900. p. 529 .....	A1.10:900
Semiarid regions, emmer, a grain for (Carleton). 1901 .....	A1.9:139
Semiarid West, new wheat industry for (Carleton). 1901 .....	A28.4:18
Semolina and macaroni, manufacture of (Skinner). 1902 .....	A19.3:20
September, weather conditions for, statement of average (Garriott). 1900. p. 395 .....	A29.6:28
Septendecim cicada. <i>See</i> Marlatt, C. L.	
Septicemia. <i>See</i> Chickens, apoplectiform septicemia.	
Serimeter, report of (Walker). 1889. p. 333 .....	A9.7:1
Serrell automatic silk reel, report of (Walker). 1887. p. 52 .....	A9.3:14
Serum therapy in hog cholera (Peters). p. 196 .....	A4.1:897

	<b>Index</b>
	<b>Classification no.</b>
Serum treatment for swine plague and hog cholera (De Schweinitz). p. 235 .....	A4.1:898
Same .....	A4.3:23
<i>See also</i> Antitoxic serum — Blood serum.	
Sevier Valley, Utah, soil survey in (Gardner and Jensen). p. 243...	A26.5:900 <sup>1</sup>
Sewage:	
Cities, note on (Brown). 1872. p. 379 .....	A27.9:10
Disposal on farm and protection of drinking water (Smith). 1896.	A1.9:43
Liquid, treatment of, in Great Britain. 1870. p. 437 .....	A27.9:8
Purification of. 1876. p. 57.....	A27.9:14
Value of deposit of city of Washington (Antisell). 1869. p. 228.	A27.9:7
<i>See also</i> Wastes.	
Sewall, J. A. Garden City, Kans., grass and forage experiment sta- tion at. p. 342.....	A1.1:891
Same. p. 342.....	A6.1:891
Seyboth, Robert. Lightning ball at sea, instance of. 1901. p. 249..	A29.6:29
Seychelles Islands, vanilla culture as practiced in (Galbraith). 1898.	A6.3:21
Shade in coffee culture (Cook). 1901.....	A6.3:25
Shade-tree insects:	
Four species of defoliators which affect trees of the capital. 1887.	A9.3:10
General work against, in cities and towns (Howard) .....	A9.5:15
Injurious, report on (Packard). 1887. p. 20 .....	A9.3:13
same (Packard). 1890.....	A8.1:4
Observations on, in New York State (Felt). 1902. p. 63 .....	A9.6:31
Problem in eastern United States (Howard). 1895. p. 361 .....	A1.10:895
Springfield and other New England cities (Howard). 1895. p. 40.....	A9.6:2
Three (Howard). 1899.....	A1.9:99
Shade trees, diseases of (Galloway and Woods). 1896. p. 237 .....	A1.10:896
<i>See also</i> Trees.	
Shadow, mountain, photograph of, note on (Abbe). 1894. p. 510 .	A29.6:22
Shaffer, J. M.:	
Barley and its uses. p. 355 .....	A1.1:865
Sheep in Iowa. p. 167.....	A1.1:864
Shakespeare, Edward Orum. Swine, epidemic diseases among, supplemental report on. p. 137 .....	A4.1:889-90
Shakespeare, Edwin Orum, and Burrill, T. J. Swine, epidemic dis- eases among, report of United States board of inquiry concern- ing. p. 129.....	A4.1:889-90
Shanghai, meat and milk inspection in (Blackwood). p. 205.....	A4.1:898
Sharp, David:	
Lamellicorns, Australian, new genus and two new species of: 1890. p. 302 .....	A9.7:2
Scymnus, two new species of. 1889. p. 364.....	A9.7:1
Sharpe, Benjamin F. Sounds, measuring and photographing, ad- vance in. 1899. p. 205.....	A29.6:27
Sharples, S. P. <i>See</i> , as collaborator, Wiley, Harvey Washington.	
Sharpshooter, glassy-winged, report of. 1893. p. 150 .....	A9.7:5
Shasta, Mount, Cal., biological survey of, results of (Merriam). 1900 .....	A5.5:16
Shattuck, C. H. Coal oil in West Virginia. p. 525.....	A1.1:863
Shaw, C. P. Jefferson memorial road, Va. 1902. p. 27 .....	A22.3:25
Shaw, R. E. Jefferson memorial road, Va. 1902. p. 9 .....	A22.3:25
Shaw, Thomas:	
Canadian field peas. 1895. p. 223 .....	A1.10:895
Rape plant, its history, culture, and uses. 1893 .....	A1.9:11
Shaw, W. B., jr. Cattle in Indian Territory, report on. 1885. No. 20. p. 27 .....	A27.9:23
Sheaf wheat, feeding of, to steers (French). p. 486.....	A4.1:898
Shear, Cornelius L.:	
Agrostology Division, Agriculture Department, field work of, since organization, July 1, 1895. 1901.....	A3.3:25
Bromus, North American species of, occurring north of Mexico, revision of. 1900 .....	A3.3:23
Grass seed, collection and distribution of; field work. 1900 .....	A1.4:9
Rescue grass. 1900 .....	A3.4:26
<i>See also</i> , as joint author, Rydberg, P. A.	

# Index

	Classification no.
Sheep:	
Animal parasites of (Curtice). 1890 .....	A4.2:Sh4 <sup>1</sup>
"Big head" (disease) of, in Utah (Rowe). p. 230.....	A4.1:901
Blood poisoning in, in New Zealand (Gilruth). p. 233.....	A4.1:901
Breeding, in New South Wales. 1875. p. 526 .....	A27.9:13
Catarrh in (Smead). 1880. p. 214 .....	A1.6:22
Cestodes of, adult, revision of (Stiles and Hassall). 1893 .....	
Condition of—	A4.3:4
1866. p. 288 .....	A27.9:4
1873. p. 143 .....	A27.9:11
1875. p. 155 .....	A27.9:13
Diseases of—	
correspondence relating to. p. 486.....	A1.1:877
same, p. 542 .....	A4.1:898
in Texas (Detmers). p. 68 .....	A1.1:883
Dog nuisance among. 1867. p. 84.....	A27.9:5
English, prices of. 1867. p. 339.....	A27.9:5
Exportation of—	
from Boston, prohibition of. 1902 .....	A4.5:100
in vessels carrying hides from foreign countries, order con- cerning. 1900 .....	A4.5:61
Farming—	
in Oregon. 1876. p. 414.....	A27.9:14
in the Pampas (Carrow). p. 223.....	A1.1:864
in Turkey. 1868. p. 365 .....	A27.9:6
Feeding of (Craig). 1897 .....	A1.9:49
same, in Nebraska. p. 604 .....	A4.1:901
Feeding wild plants to (Nelson). p. 421 .....	A4.1:898
same, p. 10 .....	A4.3:22
Fine-wooled (Sanford). p. 185.....	A1.1:864
Flukes and tapeworms of—	
bibliography (Hassall). 1898. p. 145 .....	A4.3:19
compendium, arranged according to their hosts (Hassall). 1898. p. 137 .....	A4.3:19
report on, with special reference to inspection of meats (Stiles). 1898. p. 11 .....	A4.3:19
Grazing, and forest growth in Cascade Mountains of Oregon (Coville). 1898 .....	A13.3:15
Great Britain (Carman). p. 145.....	A4.1:889-90
Hampshire Down, note on (Morrell). 1868. p. 462.....	A27.9:868
Importation of. 1867. p. 203.....	A27.9:5
Imported into United States without quarantine. 1895. p. 29...	A4.1:895-6
Imported into United States, regulations for inspection and quar- antine—	
Dec. 28, 1899 .....	A4.5:56
Jan. 27, 1900, modification.....	A4.5:58
June 1, 1900, amendment.....	A4.5:64
Oct. 20, 1900, amendment .....	A4.5:77
Nov. 10, 1900, amendment.....	A4.5:79
Imports of, by Great Britain, 1898-1900. p. 606.....	A4.1:901
Industry in. <i>See</i> Sheep husbandry.	
Industry of Colorado (Kennedy). p. 367 .....	A4.1:891-2
Inspection and movement of. 1896. p. 242.....	A4.1:897
Killed by dogs, 1858-63. p. 183 .....	A27.9:4
Larkspur poisoning of (Wilcox). p. 473 .....	A4.1:898
Long-wool (Dodge). p. 479.....	A1.1:865
Losses of—	
1873. p. 150 .....	A27.9:11
1875. p. 159 .....	A27.9:13
Mutton—	
establishing a flock of (Beal). 1900. p. 23 .....	A1.9:119
why and where profitable (Dodge). p. 341.....	A1.1:866
Prairies (Grinnell). p. 300.....	A1.1:862
Quarantine of, in New England States. 1902 .....	A4.5:99
Raising, for mutton (Curtiss). 1899 .....	A1.9:96
<i>See also</i> Sheep husbandry.	
Raising and feeding, importance of (Taylor). p. 249 .....	A1.1:864



<b>Sheep—Continued</b>	
Roundworms in, treatment of (Stiles)—	
1901 .....	A4.4:35
1902. p. 7 .....	A4.3:35
Sales of, in England. 1868. p. 408.....	A27.9:6
Selection, treatment, and diseases of, in United States (Randall). p. 229 .....	A1.1:863
Stall-feeding (Harris). p. 317 .....	A1.1:862
Tapeworm disease of, of western plains (Curtice). p. 167 .....	A4.1:887-8
Verminous diseases of, in Texas (Stiles). p. 356.....	A4.1:900
same, further investigations of (Stiles). p. 223 .....	A4.1:901
<i>See also</i> Animals, domestic—Cattle orders—Farm animals— “Golden fleece”—Infantado sheep—Kentucky sheep—Live stock—Merinos—Mutton—“Ontario,” merino ram—Ovine caseous lymph-adenitis—Paular sheep—Quarantine—Somali sheep—Spanish merinos—Texel or Mouton Flandrin sheep.	
<b>Sheep and wool:</b>	
Cape Colony (Roberts). p. 522.....	A4.1:898
Review of progress of American sheep husbandry (Dodge). 1900..	A1.8:66
Statistical report on, of the world (Dodge). p. 207 .....	A1.1:875
<b>Sheep breeders' associations, list of, with officers:</b>	
1898. p. 614 .....	A1.10:898
1899. p. 694 .....	A1.10:899
1900. p. 649 .....	A1.10:900
1901. p. 625 .....	A1.10:901
<b>Sheep husbandry:</b>	
Arizona. 1891. p. 20 .....	A27.9:29
Colorado in 1897 (McNeely). p. 377.....	A4.1:898
Condition and prospects of, in United States. p. 242.....	A1.1:862
Condition of sheep industry west of Mississippi River (Heath). p. 247 .....	A4.1:889-90
Connection of tobacco culture with. 1878. p. 125.....	A1.2:Sh3
Delaware (Webb). 1883. p. 172 .....	A1.7:2
Few facts in. p. 378.....	A1.1:869
Georgia—	
1875. p. 523 .....	A27.9:13
1878. (Peters). p. 120.....	A1.2:Sh3
History and present condition of sheep industry in U. S. 1892 ..	A4.2:Sh4 <sup>2</sup>
Contents:	
1. In States east of Mississippi River (Carman). p. 11.	
2. West of Mississippi River (Heath and Minto). p. 701.	
Iowa (Shaffer). p. 167 .....	A1.1:864
Nebraska (McCann). p. 193.....	A1.1:864
North Carolina (Young). 1878. p. 115 .....	A1.2:Sh3
Oregon. 1876. p. 479.....	A27.9:14
Pacific Northwest (Withcombe). 1900. p. 5 .....	A1.9:117
South—	
paper on (Ellzey). 1883. p. 173.....	A1.7:2
report on (Hayes). 1879. p. 63 .....	A1.2:Sh3
South Carolina, Georgia, and Texas (Watts). 1877. p. 118.....	A1.2:Sh3
Tennessee. 1878 .....	A1.2:Sh3
Texas (Jenks). 1877. p. 122.....	A1.2:Sh3
United States. 1879 .....	A1.2:Sh3
West (Boardman). p. 286 .....	A1.1:862
<b>Sheep scab:</b>	
How stamped out in New Zealand. p. 505 .....	A4.1:900
Investigations relative to. p. 155.....	A4.1:897
Nature and treatment (Salmon and Stiles). p. 98 .....	A4.1:897
same (Salmon and Stiles). 1898.....	A4.3:21
Texas. 1867. p. 204 .....	A27.9:5
Work against (Salmon). p. 69 .....	A4.1:900
same (Salmon and Stiles). 1901. p. 583.....	A4.1:901
<i>See also</i> Cattle orders—Lime-and-sulphur dips.	
Sheep-scab mite and low temperature (Holcombe). p. 605.....	A4.1:901
Sheet waters. <i>See</i> Underflow and sheet waters.	
Sheffield, O. H. Road system of Georgia, improvement of. 1894...	A22.3:3

# Index

	Classification no.
Sheffield, England, cost of hauling farm products over wagon roads at (Bedle). p. 3.....	A22.4:27
Sheldon, C. S. <i>See</i> , as collector, Holzinger, J. M.	
Shell roads. <i>See</i> Roads.	
Shells, land and fresh-water, collected in California and Nevada by Death Valley expedition, with few additional species obtained by C. Hart Merriam and assistants in parts of southwestern United States (Stearns). 1893. p. 269.....	A5.5:7
Shelton Tobacco Curing Co., Asheville, N. C. Planter's guide for cultivating and curing tobacco, with information and instruction concerning the Shelton tobacco hanger. 1876.....	A1.8:10
Shenstone, J. C. Condensed milk, composition of. 1890. p. 149..	A7.3:24
Shepard, Charles U.: Tea culture, the experiment in South Carolina. 1899.....	A1.8:61
Tea raising at Pinehurst experimental tea garden, near Summer-ville, South Carolina, special report on. p. 627.....	A1.1:892
<i>See also</i> Saunders, William.	
Sherman, H. C.: Metabolism of nitrogen, sulphur, and phosphorus in human organism, experiments on. 1902.....	A10.3:121
Nitric nitrogen, determination of. 1895. p. 112.....	A7.3:47
<i>See also</i> , as joint author, Atwater, Wilbur Olin.	
Sherwood, E. R. Remarks of, at 2d convention of Weather Bureau officials, Milwaukee, Wis., 1901. p. 227.....	A29.3:31
Shimonoseki, treaty of, between China and Japan of April 17, 1895, and our possibilities of trade with those countries.....	A12.4:5
Shinn, Charles H. Myers, John A., brief recollections of. 1902. p. 67.....	A7.3:67
Ship timber in United States (Bates). p. 472.....	A1.1:866
Ships: Barograph on, note on— 1898 (Abbe). p. 567.....	A29.6:26
1899 (Abbe). p. 60.....	A29.6:27
1900 (Page). p. 590.....	A29.6:27
Rainfall measurements on, notes on (Abbe). 1898. p. 313.....	A29.6:26
Shiver, Frank Scott: Fertilizers containing organic materials, total phosphoric acid in, determination of. 1891. p. 109.....	A7.3:31
Nitric nitrogen, determination of, by zinc-iron method. 1894. p. 142.....	A7.3:43
Shoeing of horses (Dickson). p. 529.....	A4.2:H78
Shoes. <i>See</i> Boots and shoes.	
Shore climate and sea temperature (Abbe). 1902. p. 314.....	A29.6:30
Shorthorned cattle. <i>See</i> Cattle.	
Short-leaf pine (Mohr). 1896. p. 87.....	A13.3:13 <sup>1</sup>
Same, with additional notes by Filibert Roth. 1897. p. 93.....	A13.3:13 <sup>2</sup>
Shorts. <i>See</i> Wheat shorts.	
Shower, mud, note on (Kimball). 1902. p. 269.....	A29.6:30
Shrews: American (Blarina and Notiosorex), revision of (Merriam). 1895. p. 5.....	A5.5:10
American (Sorex), synopsis of (Merriam). 1895. p. 57.....	A5.5:10
Long-tailed, of eastern United States (Miller). 1895. p. 35.....	A5.5:10
Shrikes, food of (Judd). 1898. p. 15.....	A5.3:9
Shriver, Howard, short biography of (Abbe). 1901. p. 67.....	A29.6:29
Shrubs: Effect of punctures of hemipterous insects on, 1886 (Webster). p. 54.....	A9.3:13
San Diego County, Cal. 1888. p. 202.....	A13.3:2
Trees and, distribution of, in deserts and desert ranges of southern California, southern Nevada, northwestern Arizona, and southwestern Utah, notes on (Merriam). 1893. p. 285.....	A5.5:7
Siberia: Dairy notes (Smith). p. 530.....	A4.1:899
Four great rivers of (Sperk). 1894. p. 101.....	A29.3:11 <sup>1</sup>
Sibirtzev, N. Russian soil investigations, translated and condensed by Peter Fireman. pp. 704, 807.....	A10.6:12

	<b>Index</b>
	<b>Classification no.</b>
Sicily, sumac in, culture of (McMurtrie). 1880.....	A1.6:26
Sieg, R. Sugar cane, diffusion process as applied in Louisiana. p. 40.....	A1.1:884
Same, 1884, p. 18.....	A7.3:2
Sierra Nevada Mountains, California, pika from, description of new species of (Merriam). 1889. p. 11.....	A5.5:2
Signal Service Bureau, War Department, sketch of work of, for agriculturist (Birkheimer). 1882. p. 110.....	A1.8:22
Same (Birkheimer). 1885. p. 191.....	A1.7:9
Signal Service, United States, meteorological work of, 1870 to 1891. 1895. p. 232.....	A29.3:11 <sup>2</sup>
Signal Service, expenditures of Weather Bureau and, statements of..	A29.2:Si2
Signals. <i>See</i> Weather Bureau signals.	
Signata. <i>See</i> Hyperaspis signata.	
Signs and weather, note on (Kimball). 1901. p. 508.....	A29.6:29
Silage:	
Alfalfa, report on (Beal). 1901. p. 25.....	A1.9:124
Cowpeas and corn for (Gettys). 1900.....	A3.4:24
For horses and hogs. 1898. p. 20.....	A1.9:103
Losses in preparation of. 1901. p. 31.....	A1.9:133
<i>See also</i> Ensilage — Silos and silage.	
Silage mixture (Robertson). 1897. p. 7.....	A1.9:56
Silesia:	
Hessian fly in, in 1869 (Cohn). 1883. App., p. 39.....	A8.1:3
Linen industry in. 1873. p. 433.....	A27.9:11
Wool of (Erdman). p. 521.....	A4.1:899
Silicates, action of oxalic acid on (Kastle and others). 1894. p. 53.	A7.3:43
Silk culture:	
Abstract of note on (Wallace). 1891. p. 64.....	A9.7:4
Agriculture Department—	
1885. p. 214.....	A1.1:885
1886. p. 546.....	A1.1:886
1887 (Walker). p. 115.....	A1.1:887
California, letter on (Prevost). 1867. p. 285.....	A27.9:5
Condition of (Bollman). p. 304.....	A1.1:872
Europe. 1872. p. 52.....	A27.9:13
Japan, 1885 (Tamari). p. 187.....	A1.7:9
Law for encouragement of. 1866. p. 287.....	A27.9:6
Progress in. p. 235.....	A1.1:870
Promotion of, report on. p. 67.....	A1.1:881-2
same, p. 67.....	A9.1:882
Report of year's operations (Walker). p. 111.....	A1.1:888
same, p. 111.....	A9.1:888
Report on. p. 282.....	A1.1:868
<i>See also</i> Raw silk.	
Silk manufacture in United States. 1874. p. 50.....	A27.9:14
Silk reel, automatic, Serrell, report on (Walker). 1887. p. 52.....	A9.3:14
Silk Section, Agriculture Department.....	A25.
Silkworms:	
Ailanthus, of China, additional observations (Morris). p. 390...	A1.1:862
Brief manual of instructions for production of silk. p. 215.....	A1.1:878
same, p. 10.....	A9.1:879
same (Riley).....	A1.6:11
Eggs of, circular relating to. n. d.....	A9.4:1
Enemy of, note on. 1886. p. 37.....	A9.3:12
Grasserie of (Walker). 1891. p. 445.....	A9.7:3
How to raise (Walker). 1890.....	A25.3:1
Japanese oak-feeding, cultivation of (Webster). 1889. p. 273..	A9.7:1
Japanese, parasite of, Ugimya sericarlæ rond. 1891. p. 113....	A9.7:4
Notes on. p. 101.....	A1.1:883
same, p. 101.....	A9.1:883
Osage orange as feed for. 1870. p. 430.....	A27.9:8
Raising, in open air. 1873. p. 358.....	A27.9:11
<i>See also</i> Japanese oak-feeding silkworm — Japanese silkworm — Mulberry silkworm.	
Silo, stave, value of, to dairy farmers (Beal). 1898. p. 23.....	A1.9:103

# Index

	Classification no.
Silos and ensilage, record of practical tests in several States and Canada. 1882.....	A1.6:48
See also Ensilage.	
Silos and silage (Plumb). 1895 .....	A1.9:32
Silt measurements, progress report on, 1900 (Nagle). p. 293.....	A10.3:104
Same, 2d progress report, 1901 (Nagle). p. 365.....	A10.3:119
Silverfish, circular on (Marlatt). 1902.....	A9.5:49
Silvester, R. W.:	
Address of, before American Association of Farmers' Institute Workers, at seventh annual meeting. 1902. p. 45 .....	A10.3:120
Education, theory of higher, some recent changes in. 1899. p. 94 .....	A10.3:65
Simmons, A. H. Agriculture in Washington Territory, statistics of. 1869. p. 370 .....	A27.9:7
Simmons, F. M., address of, before Good Roads Convention at Winston-Salem, N. C. 1902. p. 12.....	A22.3:23
Simpson, C. B. Codling moth, investigation of, in Idaho. 1900. p. 51.....	A9.6:30
Same, in Northwest, during 1901.....	A9.6:35
Simpson, J. H. Florida plants. p. 389.....	A1.1:889
Same, p. 389.....	A6.1:889
Simpson, John M. Osier culture. 1898 .....	A13.3:19
Sims, Alfred F.:	
Climate, permanence of. 1901. p. 121 .....	A29.6:29
Meteorological observatories, suburban. 1902. p. 215.....	A29.3:31
Press, commercial bodies, and scientific organizations, relations of weather officials with, how promoted. 1899. p. 74 .....	A29.3:24
Tornado, March 26, 1895, at Albany, N. Y., report of. p. 92 .....	A29.6:23
Simulium. See Buffalo-gnats.	
Sinclair, Angus. Transportation, development of, in United States. 1899. p. 643 .....	A1.10:899
Siris tree. See Lebbek tree.	
Sirrinc, F. A.:	
Asparagus, power sprayer for. 1901. p. 177 .....	A10.3:99
Asparagus pest, little known. 1901. p. 177.....	A10.3:99
See, as joint author, Osborn, Herbert.	
Sirups, making, and sugar and imphee and sorghum culture, report on (Smith). p. 129.....	A1.1:862
See also Cane juices and sirups—Maple sirup—Molasses—Sorghum sirup—Table sirups.	
Sisal hemp, or jenequen:	
Culture in United States [Florida], with statements relating to industry in Yucatan and Bahama Islands, and brief considerations upon questions of machinery for extracting fiber (Dodge). 1891.....	A11.5:3
False, in Florida (Dodge). 1892. p. 28 .....	A11.5:5
same, description of (Baker). 1892. p. 32 .....	A11.5:5
Industry in Bahama Islands (McLain). 1891. p. 52 .....	A11.5:3
Report on. p. 257.....	A1.1:869
Sitanion, genus, synopsis of (Smith). 1899.....	A3.3:18
Siva, C. Samba. Agriculture in India, account of. 1874. p. 389 .....	A27.9:12
Six-spotted mite of orange (Riley). 1890. p. 225 .....	A9.7:2
Skies. See Sky.	
Skim milk:	
As food for young chickens (Anderson). p. 477 .....	A4.1:899
Bread making and. 1900. p. 16 .....	A1.9:114
For young chickens. 1898. p. 20.....	A1.9:84
What is most profitable way to dispose of? (Hills). 1896. p. 95.....	A10.3:41
Skin disease among:	
Cattle (Trumbower). p. 325 .....	A4.2:C29'
Horses (Law). p. 419 .....	A4.2:H78
Skinner, Charles R. Arbor Day, relation of, to agriculture and horticulture. p. 34 .....	A1.8:56
Skinner, Geo. D. See, for report as foreman, 1894, Printing Office, Agriculture Department.	
Skinner, Robert P. Semolina and macaroni, manufacture of. 1902.....	A19.3:20

	<b>Index</b>
	<b>Classification no.</b>
Skins, museum, preparation of (Merriam). 1889 .....	A5.4:11
See also Hides and skins.	
Skipper. See Cheese or meat skipper.	
Skunks:	
Little striped, of genus <i>Spilogale</i> , contribution toward revision of (Merriam). 1890. p. 1.....	A5.5:4
Revision of genus <i>Chincha</i> (Howell). 1901 .....	A5.5:20
Sky:	
Blue color of, notes on (Abbe). 1899. p. 113 .....	A29.6:27
Cloudless, lightning from, notes on—	
(Abbe). 1900. pp. 292, 556 .....	A29.6:28
(Ashcraft). 1900. p. 489 .....	A29.6:28
(Pague). 1900. p. 429 .....	A29.6:28
Polarization, study of, with reference to weather conditions (Schultz). 1902. p. 28.....	A29.3:31
Prairie, note on (Abbe). 1898. p. 217 .....	A29.6:26
Probable state of, along path of total eclipse of sun, May 28, 1900 (Bigelow). p. 404.....	A29.6:26
Sky light:	
Blue, color and polarization of, with bibliography (Dorsey). 1900. p. 382 .....	A29.6:28
Character of (Abbe). 1897. p. 207.....	A29.6:25
Skyland, Page County, Va., local thunder storms at, observations for 1900 (Cragin and Cragin). pp. 328, 389 .....	A29.6:28
Slade, Elisha. Onion, history, culture, and preservation of. p. 235.	A1.1:865
Slags. See Basic phosphatic slags.	
Slaughterhouse, country, as factor in spread of disease (Stiles). 1896. p. 155 .....	A1.10:896
Sleepers. See Railroads.	
Sleet:	
Notes on (Abbe). 1901. p. 175.....	A29.6:29
Storms of, note on (Abbe). 1900. p. 113.....	A29.6:28
Slingerland, Mark Vernon:	
Bean weevil, report on. 1892. p. 86 .....	A9.7:5
<i>Drasteria erechtea</i> , report on. 1892. p. 87.....	A9.7:5
Entomology, some suggestions and notes on, presented to Entomology Section of Association of American Agricultural Colleges and Experiment Stations, at fifteenth annual meeting, 1901. p. 120 .....	A10.3:115
Pear-leaf blister mite, report on. 1892. p. 104.....	A9.7:5
Pear-tree psylla, report on. 1892. p. 100.....	A9.7:5
Slingerland, William H. "Cream-pot" stock, history of. p. 291...	A1.1:866
Slip-records for entomologists, note on (Cockerell). 1893. p. 198...	A9.7:6
Slop for pigs. 1901. p. 26.....	A1.9:133
Small-pox, animal, note on. 1866. p. 56 .....	A27.9:4
Smart, Charles. Meteorology in United States, connection of Army Medical Dept. with development of. 1895. p. 207 .....	A29.3:11*
Smart, James H., address of, as president of Association of American Agricultural Colleges and Experiment Stations, at fourth annual convention. 1890. p. 37.....	A10.5:3
Smead, C. D. Catarrh in sheep. 1880. p. 214 .....	A1.6:22
Smith, Abraham E. Deerskins, exports of, from British Columbia. p. 519.....	A4.1:900
Smith, Augustine J. Agricultural education, necessity of. 1883. p. 22 .....	A1.7:2
Same .....	A1.8:25
Smith, A. W. See, as collaborator and joint author, Atwater, Wilbur Olin.	
Smith, C. B.:	
Agricultural conditions, general, in United States, as related to work of agricultural experiment stations. 1900. p. 19.....	A10.3:80
Agricultural education in France. 1900. p. 115.....	A1.10:900
Blueberries, improvement of. 1900. p. 18.....	A1.9:119
Fertilizers, nitrogenous, for market-garden crops. 1901. p. 12..	A1.9:124
German common school with a garden. 1899.....	A10.4:42
Grafting grape cuttings. 1900. p. 9 .....	A1.9:122
Muskmelons, transplanting, experiments in. 1900. p. 20.....	A1.9:119

# Index

	Classification no.
Smith, C. B.—Continued	
Pecan culture. 1901. p. 16.....	A1.9:124
Potatoes, extra-early, methods of securing. 1900. p. 6.....	A1.9:114
Rhubarb, forcing, results of. 1899. p. 13.....	A1.9:107
<i>See also</i> , as joint author, Beal, Walter Henry.	
Smith, C. B., and Beal, Walter Henry. Persimmons, desirable qualities as a fruit. 1899. p. 9.....	A1.9:107
Smith, C. B., and Langworthy, Charles Ford:	
Chestnuts, culture of. 1900. p. 9.....	A1.9:114
Olives, culture and uses of. 1900. p. 11.....	A1.9:122
Smith, C. D.:	
Annual address of president at meeting of American Association of Farmers' Institute Workers, held at Buffalo, N. Y., Sept. 18 and 19, 1901. 1902. p. 13.....	A10.3:110
Potatoes, feeding value of. p. 511.....	A4.1:898
Smith, D. C. Wharton, address of, before national road conference, July, 1894. p. 43.....	A22.3:10
Smith, E. J. Madder, culture of, in Smyrna. 1870. p. 284.....	A27.9:8
Smith, Edward C. Vermont, road improvement in, extract from governor's message. p. 10.....	A22.4:33
Smith, Erwin F.:	
Bacterial disease of tomato, eggplant, and Irish potato. 1896....	A28.3:12
Black rot of cabbage. 1898.....	A1.9:68
Ergot, prevalence of, in 1889. 1889. p. 203.....	A28.5:5
Fertilizers, experiments with, for prevention and cure of peach yellows, 1889-92.....	A28.3:4
Field notes, 1892, report on. 1891. p. 373.....	A28.5:7
Fruits, field notes, 1890. 1891. p. 107.....	A28.5:6
Grape mildews and grape rot in U. S., synopsis of replies to circular relative to. 1886. p. 45.....	A6.3:2
Legal enactments for restriction of plant diseases, compilation of laws of U. S. and Canada. 1896.....	A28.3:11
Peach blight, note on. 1891. p. 36.....	A28.5:7
Peach growing for market. 1895.....	A1.9:33
Peach rosette, report on. 1891. p. 143.....	A28.5:6
same, additional notes. 1891. p. 226.....	A28.5:7
Peach rot and peach blight, report on. 1889. p. 123.....	A28.5:5
Peach yellows—	
preliminary report. 1888.....	A6.3:9
what to do for. 1891. p. 15.....	A28.5:6
Peach yellows and peach rosette. 1894.....	A1.9:17
same, additional evidence on communicability of. 1891.....	A28.3:1
Peaches, field notes on. 1891. p. 88.....	A28.5:7
<i>Pseudomonas hyacinthi</i> , <i>Ps. campestris</i> , <i>Ps. phaseola</i> , and <i>Ps. stewarti</i> , four one-flagellate yellow bacteria parasitic on plants, cultural characters of. 1901.....	A28.3:28
Spotting of peaches, report on. 1889. p. 32.....	A28.5:5
Wakker's hyacinth germ. 1901.....	A28.3:26
Wilt disease of cotton, watermelon, and cowpea. 1899.....	A28.3:17
Smith, Eugene A. Cotton belt, report on. 1885. p. 59.....	A8.1:4
Smith, Halsted, address of, before national road conference, July, 1894. p. 39.....	A22.3:10
Smith, Henry M. Yaupon, chemical notes on. 1872. p. 20.....	A27.9:10
Smith, Herman W. Weather Bureau Library, monthly additions to, Apr.—Nov. 1897.....	A29.6:25
Smith, J. H. Imphee and sorghum culture and sugar and sirup making. p. 129.....	A1.1:862
Smith, J. W. Boston weather forecast district, report of, monthly. July, Oct.—Dec., 1901.....	A29.6:29
Same, Jan.—Oct., 1902.....	A29.6:30
Smith, J. W. Forest-tree culture in Dakota. 1891. p. 50.....	A13.3:5
Smith, J. Warren:	
Derecho of May 16, 1899, in Ohio. p. 196.....	A29.6:27
Meteorology, popular lectures on, including lectures to farmers' institutes, social gatherings, societies, etc.; are such lectures valuable in proportion to time given? what should be the general character of such lectures? 1902. p. 92.....	A29.3:31



Smith, J. Warren—Continued	
Phenological data. 1902. p. 196 .....	A29.3:31
Washouts, floods, cold waves, heavy snowfalls, warnings of, for benefit of transportation companies. 1899. p. 37 .....	A29.3:24
Weather, effect of, on birds. 1895. p. 212 .....	A29.6:23
Weather Bureau instrument shelter. 1893. p. 25 .....	A29.3:7
Weather Bureau observers, stations of instruction for newly appointed; should not certain important Weather Bureau stations be designated? 1899. p. 105 .....	A29.3:24
Smith, Jared Gage:	
Alfalfa or lucern .....	A1.9:31
Cowpeas, report on .....	A1.9:89
same, p. 287 .....	A1.10:896
same .....	A3.4:5
Florida beggar weed. 1899 .....	A3.4:13
Fodder and forage plants, exclusive of grasses .....	A3.3:2
Forage conditions of prairie regions. 1895. p. 309 .....	A1.10:895
Forage plants for cultivation on alkali soils. 1898. p. 535 .....	A1.10:898
Gram, chick-pea, or Idaho pea. 1898 .....	A3.4:7
Grass gardens, experimental. 1895 .....	A3.4:1
Grazing problems in Southwest and how to meet them. 1898 .....	A3.3:16
Hawaii Agricultural Experiment Station, annual report for 1901. p. 361 .....	A10.1 <sup>2</sup> :901
Leguminous forage crops. 1897. p. 487 .....	A1.10:897
Meadows and pastures, formation and cultivation in middle Eastern States .....	A1.9:66
Plant introduction, commercial. 1900. p. 131 .....	A1.10:900
Range improvements, experiments in. 1898 .....	A3.4:8
Salt bushes. 1896 .....	A3.4:3
Seed and plant introduction, work of Agriculture Department in, since 1897. 1901. p. 145 .....	A10.3:99
Sitanion, genus, synopsis of. 1899 .....	A3.3:18
Velvet bean. 1899 .....	A3.4:14
Vetches, cultivated .....	A3.4:6
<i>See also</i> , as joint author, Scribner, Frank Lamson.	
Smith, John Bernhard:	
Aphididæ, some questions relating to. 1891. p. 226 .....	A9.7:3
Blackberry borers and gall makers, notes on. 1891. p. 27 .....	A9.7:4
Carbon bisulphide as an insecticide. 1894. p. 108 .....	A9.7:7
Clover-leaf beetle, invasion by. 1891. p. 231 .....	A9.7:3
Cranberry and hop insects, report upon. 1884. p. 9 .....	A9.3:4
Cut-worms, remedies for. p. 273 .....	A1.1:885
Entomological notes and problems. 1895. p. 6 .....	A9.6:2
Fertilizers as insecticides. 1891. p. 217 .....	A9.7:3
Insecticides, farm practice, and fertilizers as. 1893. p. 93 .....	A9.7:6
Insects affecting the hop and cranberry. p. 393 .....	A1.1:884
Lachnosterna fusca, notes on. 1888. p. 180 .....	A9.7:1
Maxillary tentacles of pronuba. 1893. p. 161 .....	A9.7:5
New Jersey insects, notes on—	
1891. p. 43 .....	A9.7:4
1892. p. 93 .....	A9.7:5
1893. p. 187 .....	A9.7:6
1894. p. 185 .....	A9.7:7
Noctuidæ, from Death Valley, descriptions of. 1893. p. 328 .....	A9.7:5
Nursery inspection. 1901. p. 165 .....	A10.3:99
Oncocnemis, new species of. 1888. p. 18 .....	A9.7:1
Parasites and predaceous insects, economic value of. 1893. p. 142 .....	A9.7:6
Petroleum, crude—	
notes on, and its effects upon plants and insects. 1901. p. 176 .....	A10.3:99
year's experience in. 1902. p. 118 .....	A10.3:115
Plum curculio, notes on. 1891. p. 219 .....	A9.7:3
Rose bugs, experience with—	
1890. p. 113 .....	A9.7:3
1891. p. 220 .....	A9.7:3
San Jose scale in New Jersey. 1894. p. 163 .....	A9.7:7
San Jose or pernicious scale, distribution of, in New Jersey. 1898. p. 32 .....	A9.6:17

# Index

	Classification no.
Snow and ice bulletins .....	A29.16:
Snow and ice measurements (Volker). 1899. p. 142.....	A29.3:24
Snow crystals:	
Micro-photographs of, notes on (Abbe). 1900. p. 541 .....	A29.6:28
Notes on (Abbe). 1901. p. 118.....	A29.6:29
Twenty years' study of (Bentley). 1901. p. 212 .....	A29.6:29
Snow dust, report on (Abbe). 1895. p. 15 .....	A29.6:23
Snow rollers, note on—	
1895 (Abbe). p. 465.....	A29.6:23
1898 (Abbe). p. 20.....	A29.6:26
1899 (Thiessen). p. 100 .....	A29.6:27
Snow slides, formation and prevention (Fernow). 1888. p. 236 .....	A13.3:2
Snow temperatures, report on (Calvert and Phillips). 1899. p. 55.....	A29.6:27
Snowfall:	
Annual, report on (Abbe). 1896. p. 491.....	A29.6:23
Colorado (Abbe). 1897. p. 210 .....	A29.6:25
First, dates of, 1886-87, 1893-94 (Abbe). p. 292 .....	A29.6:22
Forests, and, note on (Abbe). 1899. p. 18.....	A29.6:27
Heavy, warnings of, for benefit of transportation companies	
(Outram). 1899. p. 38 .....	A29.3:24
same (Smith). 1899. p. 37.....	A29.3:24
Normal annual (Abbe). 1894. p. 373.....	A29.6:22
same (Henry). 1898. p. 108 .....	A29.6:26
North Dakota, 1895 (Abbe). p. 463 .....	A29.6:23
Rocky Mountains, notes on (Abbe). 1900. p. 18 .....	A29.6:28
Total, for winter 1895-96 (Abbe). p. 167 .....	A29.6:24
Snowfall and its equivalent in water, notes on (Abbe). 1901. p. 219.....	A29.6:29
Snowfall bulletins, special (Abbe). 1898. p. 21 .....	A29.6:26
Snowstorms, memorable, in South Dakota (Glenn). 1897. p. 14....	A29.6:25
Snyder, Harry:	
Albuminoid nitrogen, determination of, error in present official	
method for; and effect of presence of metals precipitable by	
potassium sulphide in determination of nitrogen by Kjeldahl's	
method. 1891. p. 39 .....	A7.3:31
Bread and bread making at University of Minnesota, studies on,	
in 1897 and 1898. p. 7.....	A10.3:67
same, 1899 and 1900 .....	A10.3:101
Fodders, fats in, determination of, by direct weighing and by loss	
of weight of the substance. 1891. p. 37.....	A7.3:31
Humus in its relation to soil fertility. 1895. p. 131 .....	A1.10:895
Nutrients, loss of, in boiling potatoes, carrots, and cabbage. 1897.	
p. 7 .....	A10.3:43
Potatoes and eggs, digestibility of. 1897. p. 20 .....	A10.3:43
Soil investigations, problems in. 1898. p. 58 .....	A7.3:56
Soils, total insoluble matter, phosphoric acid, lime, and potash	
in, determination of. 1895. p. 48.....	A7.3:47
Snyder, S. J. H. Locusts or grasshoppers in Kansas. 1868. p. 456..	A27.9:6
Soaps, insecticide, report on (Marlatt). 1896. p. 38.....	A9.6:6
Societies. See Names of societies.	
Soda ash for wireworms. 1869. p. 300 .....	A27.9:7
Sodium carbonate, or black alkali:	
Formation of by plants (Cameron). 1902. p. 61.....	A1.8:71
Resistance to, by certain plants (Cameron). 1902. p. 71 .....	A1.8:71
Sodium chloride, aqueous solutions of, solubility of gypsum in	
(Cameron). 1901. p. 25 .....	A26.3:18
See also Potash.	
Soil analysis:	
Discussion of, summary (Hilgard). p. 170 .....	A1.1:885
Late progress in (Hilgard). 1896. p. 88.....	A10.3:30
Mechanical, rapid method of, including use of centrifugal force	
(Hopkins). 1898. p. 67 .....	A7.3:56
Method for taking samples (Hopkins). 1902. p. 152.....	A7.3:67
Notes on (McMurtrie). 1874. p. 46 .....	A27.9:12
Objects and interpretation of (Hilgard). 1886. p. 29.....	A7.3:10
Objects and methods of (Hilgard). 1897. p. 84.....	A7.3:51
Physical and chemical methods of (Hilgard). 1893. p. 60.....	A7.3:38

**Soil analysis—Continued**

Principles and methods of (Richards). 1886 .....	A7.3:10
Report on (Kedzie). 1891. p. 116 .....	A7.3:31
Separation of alkalies in, by official method (Hopkins). 1902. p. 43.	A7.3:67
Soil collection of Division of Soils, Agriculture Department, first 4,000 samples in (Whitney). 1899 .....	A26.3:16
Soil map of Connecticut Valley, description of. 1900 .....	A26.4:7
Soil physics, relation of tillage to (Sanborn). 1891. p. 97 .....	A10.5:3
Soil solutions:	
Capillary studies and filtration of clay from. 1902 .....	A26.3:19
Filtration of suspended clay from (Briggs). 1902. p. 31 .....	A26.3:19
Potash in, note on direct determination of (Peter). 1894. p. 65.	A7.3:43
Their nature and functions, and classification of alkali lands (Cameron). 1901 .....	A26.3:17
Soil survey:	
Abstracts of reports of agricultural experiment stations on, 1889- 1902 .....	A10.6:
Alamance County, North Carolina (Coffey and Hearn). p. 297..	A26.5:901 <sup>1</sup>
Allegan County, Michigan (Fippin and Rice). p. 93 .....	A26.5:901 <sup>1</sup>
Bedford area, Virginia (Mooney and others). p. 239 .....	A26.5:901 <sup>1</sup>
Boise area, Idaho (Jensen and Olshausen). p. 421 .....	A26.5:901 <sup>1</sup>
Cache la Poudre Valley, Colorado, 1900 (Means). p. 121 .....	A1.8:64
Calvert County, Maryland (Bonsteel and Burke). p. 147 .....	A26.5:900 <sup>1</sup>
Cary area, North Carolina (Coffey and Hearn). p. 311 .....	A26.5:901 <sup>1</sup>
Cecil County, Maryland (Dorsey and Bonsteel). p. 103 .....	A26.5:900 <sup>1</sup>
Charles Lake area, Louisiana (Heileman and Mesmer). p. 621 ..	A26.5:901 <sup>1</sup>
Cobb County, Georgia (Burke and Marean). p. 317 .....	A26.5:901 <sup>1</sup>
Connecticut Valley (Dorsey and Bonsteel). 1900. p. 125 .....	A1.8:64
Covington area, Georgia (Marean). p. 329 .....	A26.5:901 <sup>1</sup>
Fresno, California (Means and Holmes). p. 333 .....	A26.5:900 <sup>1</sup>
Hanford area, California (Lapham and Heileman). p. 447 .....	A26.5:901 <sup>1</sup>
Harford County, Maryland (Smith and Martin). p. 211 .....	A26.5:901 <sup>1</sup>
Imperial, California (Means and Holmes). p. 587 .....	A26.5:901 <sup>1</sup>
same (Means and Holmes). 1902 .....	A26.4:9
Kent County, Maryland (Bonsteel). p. 173 .....	A26.5:900 <sup>1</sup>
Lancaster, Pennsylvania (Dorsey). p. 61 .....	A26.5:900 <sup>1</sup>
Lebanon area, Pennsylvania (Smith and Bennett). p. 149 .....	A26.5:901 <sup>1</sup>
Montgomery County, Ohio (Dorsey and Coffey). p. 85 .....	A26.5:900 <sup>1</sup>
Montgomery County, Tennessee (Lapham and Miller). p. 341 ..	A26.5:901 <sup>1</sup>
Pecos Valley, New Mexico (Means and Gardner). 1900. p. 36 ..	A1.8:64
Prince Edward area, Virginia (Mooney and Caine). p. 259 .....	A26.5:901 <sup>1</sup>
Prince George County, Maryland (Bonsteel and party). p. 173..	A26.5:901 <sup>1</sup>
Problems in (Snyder). 1898. p. 58 .....	A7.3:56
Purpose of (Whitney). 1901. p. 117 .....	A1.10:901
Raleigh to Newbern, North Carolina (Smith). p. 187 .....	A26.5:900 <sup>1</sup>
Russian (Sibirtzev). pp. 704, 807 .....	A10.6:12
St. Mary County, Maryland (Bonsteel). p. 125 .....	A26.5:900 <sup>1</sup>
Salem area, New Jersey (Bonsteel and Taylor). p. 125 .....	A26.5:901 <sup>1</sup>
Salinas Valley, lower, California (Lapham and Heileman). p. 481.	A26.5:901 <sup>1</sup>
Salt Lake Valley, Utah (Gardner and Stewart). 1900. p. 77 ...	A1.8:64
Salt River Valley, Arizona (Means). p. 287 .....	A26.5:900 <sup>1</sup>
San Gabriel, California (Holmes and Mesmer). p. 559 .....	A26.5:901 <sup>1</sup>
Sanpete, Cache, and Utah counties, Utah (Means). 1900. p. 115.	A1.8:64
Santa Ana, California (Holmes). p. 385 .....	A26.5:900 <sup>1</sup>
Sevier Valley, Utah (Gardner and Jensen). p. 243 .....	A26.5:900 <sup>1</sup>
Statesville area, North Carolina (Dorsey and party). p. 273 .....	A26.5:901 <sup>1</sup>
United States (Whitney). 1899. p. 335 .....	A1.10:899
Ventura area, California (Holmes and Mesmer). p. 521 .....	A26.5:901 <sup>1</sup>
Weber County, Utah (Gardner and Jensen). p. 207 .....	A26.5:900 <sup>1</sup>
Westfield area, New York (Burke and Marean). p. 75 .....	A26.5:901 <sup>1</sup>
Willis area, Texas (Martin). p. 607 .....	A26.5:901 <sup>1</sup>
Yakima area, Washington (Jensen and Olshausen). p. 389 .....	A26.5:901 <sup>1</sup>
Yazoo area, Mississippi (Bonsteel and party). p. 359 .....	A26.5:901 <sup>1</sup>
Soil thermometers, maximum and minimum, combined, instruc- tions for use of .....	A29.11:G
Soils:	
Acid, effect of lime on different crops on. 1901. p. 6 .....	A1.9:133

# Index

	Classification no.
<b>Soils—Continued</b>	
Acid digestion of—	
effects of presence of few drops of nitric acid in (Thompson).	
1895. p. 49 .....	A7.3:47
vessels for (Kedzie). 1893. p. 82.....	A7.3:38
Acidity on upland or naturally well drained, report on necessity	
of tests for (Wheeler). 1895. p. 45 .....	A7.3:47
Action of oxalic acid upon (Kastle and others). 1894. p. 53....	A7.3:43
Arable—	
moisture content of, electrical method of determining (Whit-	
ney and others). 1897.....	A26.3:6
nitrification of (Dehérain). 1896. pp. 353, 491.....	A10.6:6
Artificial plant food, requirements of (Kilgore). 1902. p. 73....	A10.3:115
Black, of Russia (Grandeau). 1872. p. 501.....	A27.9:10
Composition of, some points on, summary and conclusion (Lawes	
and Gilbert). 1886. p. 25.....	A7.3:10
Cotton cultivation and (Whitney). 1896. p. 143 .....	A10.3:33
Crop production and (Whitney). 1894. p. 129 .....	A1.10:894
Crops and, note on, 1892-98 (Abbe). p. 16 .....	A29.6:28
Cultivation of, by irrigation, 1891 (Hinton).....	A15.2:1r7
Deficiencies in, pot experiment to test field observations concern-	
ing (Hartwell). 1901. p. 73.....	A7.3:62
Different, ammonium sulphate and cotton-seed meal in, nitrifica-	
tion of (Withers and Fraps). 1902. p. 36 .....	A7.3:67
Dry and moist, capillary movement of water in (Briggs and Lap-	
ham). 1902. p. 19 .....	A26.3:19
Electrical resistance of, effect of water and soluble salts on	
(Whitney and Means). 1897.....	A26.3:8
Evaporation of water from, salts as influencing rate of (Briggs).	
1900. p. 184 .....	A1.8:64
Exhaustion and abandonment of, testimony of Milton Whitney	
before Industrial Commission. 1901.....	A1.8:70
Features of, that should be recognized in all plat work (Whitney).	
1891. p. 91 .....	A10.3:7
Ferments important in agriculture (Wiley). 1895. p. 69.....	A1.10:895
Fertility of—	
humus in its relation to (Snyder). 1895. p. 131 .....	A1.10:895
influence of different systems of farming on. p. 9.....	A1.9:87
loss of, in drainage water. 1898. p. 4.....	A1.9:73
maintenance of. 1901. p. 5 .....	A1.9:144
restoration of. 1897. p. 686 .....	A1.10:897
Fertilization of, as affecting orange, in health and disease (Web-	
ber). 1894. p. 193.....	A1.10:894
Field, moisture in. 1896.....	A26.3:4
Forest clearing and cultivation, effect on (Fulton). 1899. p. 89.	A29.3:24
same (Salisbury). 1899. p. 91 .....	A29.3:24
Growing various crops on, effect of. 1897. p. 684 .....	A1.10:897
Humus in, importance of maintaining a supply of. 1898. p. 5..	A1.9:78
Inoculation for leguminous plants (May and Beal). 1901. p. 7.	A1.9:124
Investigation of. See Soil survey.	
Liming of—	
from a physiological standpoint (Loew). 1901 .....	A19.3:1
report on (Wheeler). 1898 .....	A1.9:77
Mechanical analysis of—	
methods of. 1896.....	A26.3:4
some necessary modifications in methods of, as applied to	
alkali soils (Briggs). 1900. p. 173 .....	A1.8:64
Moisture in—	
conserving and economizing. 1899. p. 5 .....	A1.9:87
determination by electrical method (Gardner). 1898 .....	A26.3:12
electrical instruments for determining (Briggs). 1899.....	A26.3:15
influence of salt and similar substances on (Beal). 1900. p. 5.	A1.9:114
mechanics of (Briggs) .....	A26.3:10
notes on, in 1898. p. 652.....	A1.10:898
record of amount of water contained in soils during—	
May, 1895 .....	A26.3:1
June, 1895.....	A26.3:2

**Soils—Continued**

**Moisture in—Continued**

record of amount of water contained in soils during—Cont'd.	
July, 1895.....	A26.3:3
1896, crop season (Whitney and Hosmer) .....	A26.3:9
Nitric acid in, determination of, by Schloesing's method, at Roth-	
amsted laboratory (Warrington). 1886. p. 47.....	A7.3:11
Nitrification and denitrification in, lectures on (Warrington). 1892.	A10.3:8
Nitrogen hungriness in, recognition of (Hilgard). 1895. p. 58..	A7.3:47
Nitrogen in, of some of the experimental fields at Rothamsted,	
determination of, and bearing of results on question of source	
of nitrogen of our crops (Lawes and Gilbert). 1882. p. 142..	A1.8:31
Particles, division of, in mechanical analysis, plea for scientific	
basis for (Hopkins). 1898. p. 64.....	A7.3:56
Phosphoric acid and potash in, determination of (Goss). 1895.	
p. 50.....	A7.3:47
Phosphoric acid in—	
estimation of, by double precipitation with molybdic solution	
and titration of ammonium phosphomolybdate with stand-	
ard alkali (Williams). 1895. p. 82.....	A7.3:47
method for determination of (Goss). 1894. p. 58.....	A7.3:43
Physical analysis of (Whitney). 1895. p. 60.....	A7.3:47
Physical properties of—	
adaptation of methods of cultivation and manuring to (Wollny).	
1900. p. 805.....	A10.6:11
artificial changes of (Wollny). 1900. p. 604.....	A10.6:11
investigations on (Briggs). p. 413.....	A26.5:900 <sup>1</sup>
in relation to moisture and crop distribution (Whitney). 1892.	A29.3:4
nature of (Wollny). 1896. pp. 761, 853, 948.....	A10.6:6
objects and methods of investigating certain (Briggs). 1900.	
p. 397.....	A1.10:900
relation of, to cultivation of plants (Wollny). 1893. pp. 528,	
627.....	A10.6:4
Physical tests of (Loughridge). 1893. p. 156.....	A10.3:16
Problems, some interesting (Whitney). 1897. p. 429.....	A1.10:897
Productiveness of, nitrification as element in (Withers). 1902. p. 87	A10.3:115
Products and, of southwestern Louisiana (Rapley). 1884.....	A1.8:35
Reasons for cultivating (Whitney). 1895. p. 123.....	A1.10:895
Relations of climate to (Hilgard). 1892.....	A29.3:3
Samples of—	
instructions for taking, for moisture determination (Whitney).	
1894.....	A26.4:2
method for taking, for analysis (Hopkins). 1902. p. 152....	A7.3:67
Sandy, treatment of (Beal). 1901. p. 10.....	A1.9:124
Shading, effect of, notes on (Abbe). 1896. p. 374.....	A29.6:24
Shifting, grasses for fixing (Vasey). 1872. p. 223.....	A27.9:10
Soluble mineral matter of (Means). 1898. p. 495.....	A1.10:898
Soluble salt content of, electrical method of determining (Whit-	
ney and Means). 1897.....	A26.3:8
same (Briggs). 1899.....	A26.3:15
Solvents for available potash, and phosphoric acid (Huston and	
Bartlett). 1896. p. 91.....	A7.3:49
Sorghum and sugar producing, character and composition of	
(Richardson). 1886. p. 60.....	A7.3:10
Strawberry. 1902. p. 16.....	A1.9:149
Study of, application of theory of solution to (Cameron). 1899.	
p. 141.....	A1.8:64
same (Cameron). 1900. p. 423.....	A26.5:900 <sup>1</sup>
Survey of. See Soil survey.	
Swamp, marsh or muck, utilization of. 1898. p. 7.....	A1.9:78
Temperature and moisture of, in Red River valley, notes on,	
1892-98 (Abbe). p. 477.....	A29.6:27
Temperature of—	
electrical instruments for determining (Briggs). 1899.....	A26.3:15
electrical method of determining (Whitney and Briggs). 1897.	A26.3:7
notes on, 1867. p. 255.....	A27.9:5
same (Seeley). 1901. p. 501.....	A29.6:29



# Index

	Classification no.
<b>Soils—Continued</b>	
Tests with fertilizers, explanations and directions for. 1889 .....	A10.4:8
Texture of some typical—	
1895. p. 556 .....	A1.10:895
1896. p. 602 .....	A1.10:896
same .....	A26.3:5
Tillage and products of, on irrigated lands (Cureton). 1887. p. 282.	A15.2:P94 <sup>1</sup>
Tobacco of United States (Whitney). 1898 .....	A26.3:11
Total insoluble matter, phosphoric acid, lime, and potash in, determination of (Snyder). 1895. p. 48 .....	A7.3:47
Types of—	
descriptions of. 1902 .....	A26.2:F45
list of, established by Division of Soils in 1899 and 1900, with brief description .....	A26.2:T99
Vegetable productions of, relation of entomology to, with reference to destructive and beneficial insects (Rathvon). p. 372.	A1.1:862
Washed, how to prevent and reclaim them. 1894 .....	A1.9:20
Water in—	
capillary rise of, influence of dissolved salts on (Briggs and Lapham). 1902. p. 5 .....	A26.3:19
movement and retention of (Briggs). 1898. p. 399 .....	A1.10:898
<i>See also</i> Alkali soils—California—Clay—Florida—Georgia—Hawaiian soils—Maine—Mississippi—Mud—Plant-soil tests—Salt Lake Valley, Utah—Sand—South Carolina.	
<b>Soils and ash. <i>See also</i> Ash.</b>	
<b>Soils and ash, committee on, report of, at Convention of Association of Official Agricultural Chemists:</b>	
1891 (Soils only). p. 116 .....	A7.3:31
1892. p. 93 .....	A7.3:35
1894. p. 28 .....	A7.3:43
1895. p. 30 .....	A7.3:47
1896. p. 80 .....	A7.3:49
1897. p. 73 .....	A7.3:51
1898. p. 49 .....	A7.3:56
1898. Supplemental report on ash. p. 56 .....	A7.3:56
1899. p. 74 .....	A7.3:57
1900. (Soils only.) p. 60 .....	A7.3:62
1901. (Soils only.) p. 28 .....	A7.3:67
<b>Soils Bureau, Agriculture Department, formerly Agricultural Soils Division; afterwards Soils Division:</b>	A26.
Field operations of—	
1899. (Whitney) .....	A1.8:64
1900 .....	A26.5:900
1901 .....	A26.5:901
Field parties of, instructions to, and descriptions of soil types. 1902 .....	A26.2:F45
Soil collection of, catalogue of first 4,000 samples in (Whitney). 1899	A26.3:16
Work of, for farmer (Whitney). 1897. p. 122 .....	A1.10:897
Solandi [sun] printing (Halsted). 1894. p. 93 .....	A10.3:20
Solano County, Cal., cattle quarantine, order for. Feb. 26, 1900 ....	A4.5:59
Solar and terrestrial magnetism, and their relations to meteorology (Bigelow). 1898 .....	A29.3:21
Solar constant, report on (Very). 1901. p. 357 .....	A29.6:29
<b>Solar eclipse:</b>	
Observations during, notes on (Abbe). 1900. p. 449 .....	A29.6:28
Total, of May 28, 1900, probable cloudiness during (Abbe). p. 422.	A29.6:27
Solar halo, note on (Abbe). 1899. p. 59 .....	A29.6:27
Solar magnetism, report on relations of, to terrestrial magnetism and meteorology (Bigelow). p. 519 .....	A29.1:891 <sup>3</sup>
Solar radiation, observations of; how best made and compiled (Schwolson). 1896. p. 721 .....	A29.3:11 <sup>3</sup>
Solar rays, physical and meteorological researches on, made at agricultural climatology station, Juvisy observatory (Flammarion). 1899. pp. 103, 203 .....	A10.6:10
Solar spots, notes on (Abbe). 1900. p. 109 .....	A29.6:28
Solberg, E. Phosphoric acid, citrate, soluble and insoluble, as determined by different methods. 1895. p. 85 .....	A7.3:47



	<b>Index</b>
	<b>Classification no.</b>
Soldiers' Home herd of cattle. <i>See</i> Bovine tuberculosis.	
Soluble acids, estimation of, in butter fat (Planchon). 1890. p. 112.	A7.3:24
Soluble ferments. <i>See</i> Enzymes.	
Soluble salts. <i>See</i> Soils.	
Solution, theory of, application of, to study of soils (Cameron). 1899. p. 141 .....	A1.8:64
Same (Cameron). 1900. p. 423 .....	A26.5:900 <sup>1</sup>
Solvents. <i>See</i> Soil solvents.	
Somali, or black-head, sheep (Masterson). p. 522.....	A4.1:898.
Sommers, Miss Sarah L. Land-grant colleges and agricultural experimental stations in United States, compilation of statistics of, for 1897 .....	A10.3:51
Same, for 1898.....	A10.3:64
Song birds. <i>See</i> Birds.	
Sonora, Mexico, plants of, collected by Edward Palmer in the years 1890 and 1891 (Rose). 1895. p. 293.....	A6.5:1
Sooty mold of orange, treatment of (Webber). 1895 .....	A28.4:15
Sorauer, P. Potato scab, report on. 1889. p. 47 .....	A6.3:8
Sorex. <i>See</i> Shrews.	
Sorgho-canes, sugar determinations from, partial summary of. 1880. No. 25. p. 23 .....	A27.9:18
Same. No. 27. p. 23.....	A27.9:18
Sorghum, or northern sugar cane:	
Analysis of (Erni). 1886. p. 336 .....	A27.9:4
Analytical work done on, by Chemical Division, July-Dec., 1880 (Collier.) 1881.....	A1.6:33
Application of diffusion to extraction of sugar from (Wiley).....	A7.3:8
As a forage crop (Williams). 1897.....	A1.9:50
Botanical history of (Pech). p. 299 .....	A1.1:865
Cultivation of, character and composition of soils best adapted to— (Bollman). p. 140 .....	A1.1:862
(Richardson). 1886. p. 60 .....	A7.3:10
(Smith). p. 129.....	A1.1:862
Culture and distillation of (Leplay). 1887. p. 110 .....	A7.3:18
Culture at Sterling, Kans. (Denton). 1891. p. 78.....	A7.3:34
<i>See also</i> Sterling, Kans.	
Data relating to, as sugar-producing plant. 1887. p. 59 .....	A7.3:18
Encouragement of beet-sugar industry and. 1883.....	A1.8:26
Experiments with. <i>See</i> Wiley, Harvey Washington.	
Growing in Spain (Heredia and Hermanos). 1893. p. 34.....	A7.3:40
Improvement of, by selection. 1899. p. 7 .....	A1.9:92
Introduction of, into United States. 1883. No. 2. p. 24 .....	A27.9:21
Investigation of, as a sugar-producing plant (Collier) .....	A1.8:27
Italy. 1884. p. 77 .....	A7.3:3
Maize and—	
as sugar plants. p. 228 .....	A1.1:877
manufacture of sugars from, circular (Le Duc). 1879 .....	A1.8:15
Report on (Clough). p. 54 .....	A1.1:864
Seeds of, Cecidomyiid injurious to (Coquillett). 1898. p. 81 ...	A9.6:18
<i>See also</i> Orange sorghum cane—Saccharine sorghums.	
Sorghum blight, status of (Kellerman and Swingle). 1889. p. 195.	A28.5:5
Sorghum molasses, statistics of. 1862-63. No. 5. p. 4.....	A27.9:1
Sorghum sirup:	
Manufacture of—	
circular on (Spencer). 1894.....	A7.4:1
report on (Denton). 1901.....	A1.9:135
same. 1899 .....	A1.9:90
New refining process for. 1867. p. 53.....	A27.9:5
<i>See also</i> Sirups.	
Sorghum sugar:	
Cold clarification of (O'Brien). 1892. p. 88.....	A7.3:37
Experiments in manufacture of, etc. <i>See</i> Attica, Kans.—Calumet plantation sugar experiment station—Cedar Falls, Iowa—Conway Springs, Kans.—Douglas, Kans.—Fort Scott, Kans.—Kansas—Kenner, La.—Lawrence, La.—Meade, Kans.—Medicine Lodge, Kans.—Morrisville, Va.—Ness City, Kans.—Rio Grande, N. J.—Sterling, Kans.	

# Index

	Classification no.
Sorghum sugar—Continued	
Industry of, address on (Loring) .....	A1.6:54
Letter of Commissioner of Agriculture to Senate Committee on Agriculture on. 1880 .....	A1.8:16
Manufacture of—	
circular relative to (Le Duc). 1879 .....	A1.8:15
report on. 1863. No. 3. p. 11 .....	A27.9:1
Production of (Clough). p. 307 .....	A1.1:865
<i>See also</i> Sugar.	
Soskins, Selik. Fat, formation of, in animal body. 1897. p. 179 ..	A10.6:8
Soule, Andrew M. Beef and dairy cattle, conformation of. 1902...	A1.9:143
Soulé, Frank. Irrigation from San Joaquin River, Cal. 1901. p. 215 .....	A10.3:100
Soulhet, F. Citric acid in milk, report on. 1889. p. 155.....	A7.3:24
Sounds, measuring and photographing, advance in (Sharpe). 1899. p. 205 .....	A29.6:27
Souring of milk, and other changes in milk products. 1895 .....	A1.9:29
South:	
Agricultural courses in, principles underlying formation of (Coates). 1900. p. 59.....	A10.3:76
Agriculture survey of, report of (Peters). 1867. p. 192.....	A27.9:5
<i>See also</i> Southern agriculture.	
Cooperative branch grass stations in (Tracy). p. 344 .....	A1.1:891
same, p. 344 .....	A6.1:891
Corn culture in. (Tracy). 1898 .....	A1.9:81
Dairying in (Tracy). 1902 .....	A1.9:151
Development of (Hanna). 1902. p. 53.....	A22.3:25
Forage plants for (Tracy). 1894.....	A1.9:18
same .....	A1.9:18 <sup>2</sup>
Forage plants grown in, composition of (Tracy). 1896. p. 91...	A10.6:6
Grape growing in the (Tracy). 1900.....	A1.9:118
Grasses and forage plants for cultivation in (Vasey). 1887 .....	A6.3:3
Hog raising in (Tracy). 1899 .....	A1.9:100
same, p. 362.....	A4.1:899
Industry of, notes on. 1866. p. 412.....	A27.9:4
same. 1867. p. 371 .....	A27.9:5
Northern emigration to. 1865. No. 6. p. 12.....	A27.9:3
Productions of, variety in. 1870. p. 426 .....	A27.9:8
Ramie culture in (Dodge). 1893. p. 164 .....	A10.3:16
Sheep husbandry in (Hayes). 1879. p. 63 .....	A1.2:Sh3
Urban population in; country being deserted; whither are we tending? 1894. p. 572 .....	A27.9:32
Winter forage crops for (Ball). 1902.....	A1.9:147
<i>See also</i> Southern States—and names of States.	
South Africa. <i>See</i> Africa.	
South African ticks, notes on some (Lounsbury). 1900. p. 41 .....	A9.6:26
South America:	
Agriculture of, with maps and latest statistics of trade (Barnes). 1892 .....	A27.8:2
Cotton crop and its enemies in, consular reports on. 1885. App., p. 59 .....	A8.1:4
Earthquakes in, notes on (Abbe). 1898. p. 365.....	A29.6:26
Foreign trade of. 1886. p. 443.....	A27.9:24
Fungi from, observations on new species (Lagerheim). 1891. p. 44.	A28.5:7
Isabella grape in. 1866. p. 426 .....	A27.9:4
Tariffs of. 1890. p. 460 .....	A27.9:28
Wool production in. 1875. p. 525 .....	A27.9:13
South Atlantic, storms in (Pinheiro). p. 204 .....	A29.3:11 <sup>1</sup>
South Australia, products of. 1876. p. 121 .....	A27.9:14
<i>See also</i> Port Carolina.	
South Carolina:	
Aurora in (Abbe). 1895. p. 297 .....	A29.6:23
Black scale of California found in, note on. 1886. p. 36 .....	A9.3:12
Climate, soil, and agricultural capabilities of (Hemphill). 1882..	A1.6:47
Coast region of, frost formation over, some peculiarities in (Jesu- nofsky). 1902. p. 479.....	A29.6:30
Farm resources and products of. 1868. p. 75 .....	A27.9:6

**South Carolina—Continued**

Farmers' institute work accomplished in (Tindall). 1902. p. 28.	A10.3:120
Grapevine diseases in (Howell). 1888. p. 35 .....	A6.3:10
Grasses of, in Elliott's Sketch of botany of South Carolina and Georgia, notes on (Scribner). 1901 .....	A3.4:29
Irrigation of rice in (Keeney). 1902. p. 59 .....	A10.3:113
Rice soils of (Whitney). 1893. p. 77 .....	A27.8:6
Sheep husbandry in (Watts). 1877. p. 118 .....	A1.2:Sh3
Storm waves of (Alexander). 1900. p. 381 .....	A29.6:28
Tea culture experiment in (Shepard). 1899 .....	A1.8:61
Tea raising in, special report on (Shepard). p. 627 .....	A1.1:892
Wheat in. 1870. p. 355 .....	A27.9:8

*See also* Charleston — Pinehurst — Summerville.

**South Dakota:**

Artesian and underflow conditions in (Coffin). 1893. pt. 4, p. 51 .....	A15.2:Ir7 <sup>2</sup>
Artesian well investigation, field work—	
(Coffin) 1890. p. 125 .....	A15.2:Ar7
(Culver). 1890. p. 55 .....	A15.2:Ar7
(Updyke). 1890. p. 110 .....	A15.2:Ar7
Bottom disease among horses of (Schroeder). p. 371 .....	A4.1:891-2
Dairy industry in (Monrad). 1896 .....	A4.3:16
Entomological notes of season from (Aldrich). 1891. p. 67 .....	A9.7:4
Geology of, west of Missouri River (Bailey). 1890. p. 65 .....	A15.2:Ar7
Maladie du coit among horses in, extirpation of (Nörsgaard). p. 62.	A4.1:893-4
Mutton in, feeding for (Chilcott and Burnett). p. 471 .....	A4.1:898
Precipitation (rain and melted snow) at stations in, details of. 1894 .....	A29.2:P91 <sup>1</sup>
Russian thistle and other troublesome weeds in wheat region of. 1893 .....	A1.9:10
Snowstorms, memorable, in (Glenn). 1897. p. 15 .....	A29.6:25

*See also* Black Hills — Highmore — Pierre.

**Southeastern States, grasses and forage plants of, notes on (Kearney). 1895 .....**

A3.3:1

**Southern agriculture, condition and prospects of:**

1867. p. 412 .....	A1.1:867
1868. (Trenchard). p. 447 .....	A27.9:6
1870. p. 473 .....	A27.9:8
1871. p. 398 .....	A27.9:9
1896. (Dabney) .....	A1.4:3

**Southern and northern farming. 1872. p. 359 .....**

A27.9:10

**South Pacific Ocean, winter barograph curve from (Ward). 1897. p. 484 .....**

A29.6:25

**Southern cattle distemper or fever. *See* Blood serum—Texas or Southern cattle fever.**

**Southern cattle ticks:**

Growing noninfected, and afterwards infecting them with Texas fever (Schroeder and Cotton). p. 33 .....	A4.1:899
Transmission of Texas fever by (Mayo). p. 481 .....	A4.1:898
Tuberculosis and, in New South Wales (Baker). p. 386 .....	A4.1:898
same, correction, p. 502 .....	A4.1:899
United States (Salmon and Stiles). p. 380 .....	A4.1:900
Vitality of (Schroeder). p. 41 .....	A4.1:899

*See also* Ticks.

**Southern fairs, agricultural representation at. 1869. p. 365\* .....**

A27.9:7

**Southern farmers, suggestions to. 1899 .....**

A1.9:98

**Southern fruit growing for market. p. 143 .....**

A1.1:871

**Southern grain louse (Pergande). 1902. p. 7 .....**

A9.6:38

**Southern interstate fair. *See* Atlanta, Ga.**

**Southern pines:**

Five, structure of wood of (Roth). p. 133 .....	A13.3:13 <sup>1</sup>
same, rev. ed. 1897. p. 143 .....	A13.3:13 <sup>2</sup>

**Mechanical and physical properties (Fernow). 1896 .....**

A13.4:12

**Southern planting and northern farming (Watts). 1872. p. 207 ...**

A27.9:10

*See also* Farming.

\*By a misprint, this page number appears twice.

# Index

	Classification no.
Southern Railway, object-lesson roads constructed in cooperation with. 1902.....	A22.3:23
Southern States:	
Apples for. p. 184 .....	A1.1:869
Concentrated fertilizers in. p. 397 .....	A1.1:868
Entomology in, report on (Garman). 1901. p. 153 .....	A10.3:99
Forage plants of secondary or undetermined importance for, and composition of forage plants grown in South (Tracy). 1896. p. 91 .....	A10.6:6
Forests, timber culture, etc., in, condition of (Baker). 1884. p. 105 .....	A13.5:4
Grasses for (Vasey). 1874. p. 379 .....	A27.9:12
Irrigation in some. 1891. pt. 1. p. 323 .....	A15.2:Ir7 <sup>2</sup>
Resources and industrial condition of (Goodloe). p. 102 .....	A1.1:865
Road building in, some essentials in modern systems of (Holmes). 1902. p. 82 .....	A22.3:23
Road building with convict labor in (Holmes). 1901. p. 319 .....	A1.10:901
Road conventions in, and object-lesson roads constructed under supervision of Office of Public Road Inquiries, with cooperation of Southern Railway. 1902 .....	A22.3:23
Roads and road-making materials in certain. 1894 .....	A22.3:7
Timber pines of, report on (Mohr) .....	A13.3:13
same, introduction to report (Fernow). p. 11 .....	A13.3:13
Trees, some foreign, of economic value adapted to planting in. 1895 .....	A13.3:11
<i>See also</i> Cotton States — South — and names of States.	
Southwest:	
Arid lands of; new species of ground squirrel from, description of (Merriam). 1889. p. 19 .....	A5.5:2
Cattle ranges of, history of exhaustion of pasturage and suggestions for its restoration (Bentley). 1898 .....	A1.9:72
Cooperative grass stations in (McLaren). p. 344 .....	A1.1:891
same, p. 344 .....	A6.1:891
Grasses and forage plants for cultivation in (Vasey). 1887 .....	A6.3:3
Grasses of. 2 pts. (Vasey) .....	A6.3:12
same, reissued. 1891 .....	A6.2:N82 <sup>1</sup>
Grazing problems in, and how to meet them (Smith). 1899 .....	A3.3:16
<i>See also</i> names of States .....	
Southwick, E. B.:	
Entomological, economic, work in parks of New York City. 1894. p. 135 .....	A9.7:7
Entomological work in Central Park, New York City. 1891. p. 59 .....	A9.7:4
Parsnip web-worm, report on. 1892. p. 106 .....	A9.7:5
Wood-leopard moth in parks of New York City. 1894. p. 138 .....	A9.7:7
Southworth, E. A.:	
Anthracnose of cotton, report on. 1891. p. 100 .....	A28.5:6
Gloeosporium nervisequum, report on. 1889. p. 51 .....	A28.5:5
Hollyhock disease, new. 1891. p. 45 .....	A28.5:6
Ripe rot of grapes and apples. 1891. p. 164 .....	A28.5:6
<i>See also</i> , as joint author, Galloway, Beverly Thomas.	
Sows and pigs at farrowing time. p. 12 .....	A1.9:97
Soxhlet-Engström, estimation of content of fat in milk by method of (Kühn). 1890. p. 158 .....	A7.3:24
Soxhlet's areometric method, estimation of fat in milk by (Klein). 1888. p. 163 .....	A7.3:24
Soy bean:	
As feeding stuff. 1899. p. 13 .....	A1.9:97
As food for man (Langworthy). p. 20 .....	A1.9:58
As forage crop (Williams) .....	A1.9:58
Spader, Comstock's rotary, description of. 1865. No. 5. p. 34 .....	A27.9:3
Spagnoli, D. B. Milan, Italy, cost of hauling farm products over wagon roads at. p. 10 .....	A22.4:27
Spain:	
Agriculture in (Cushing). p. 287 .....	A1.1:876
Eggs in. p. 609 .....	A4.1:901
Foreign trade of (Hitchcock). 1898 .....	A12.3:11

Spain—Continued	
Forest trees in, planting of, and destruction of locusts. 1876. p. 263 .....	A27.9:14
Irrigation in. 1891. p. 278 .....	A15.2:P94 <sup>1</sup>
Our trade with, 1888-97 (Hitchcock). 1898 .....	A12.3:12
Sorghum growing in (Heredia and Hermanos). 1893. p. 34....	A7.3:40
<i>See also</i> Malaga.	
Spalding, V. M. White pine, report on, revised and enlarged by B. E. Fernow. 1899 .....	A13.3:22
Spallanzani, Pellegrino. Volatile acids, fatty, of butter, contribu- tion to study of. 1890. p. 104 .....	A7.3:24
Spanish almonds and their introduction into America (Fairchild). 1902 .....	A19.3:26
Spanish fever of cattle:	
Investigation of (Catron). 1868. p. 357 .....	A27.9:6
Note on—	
1867. pp. 54, 135 .....	A27.9:5
1868. pp. 180, 404 .....	A27.9:6
Spanish merinos and their management (Boynton). p. 196 .....	A1.1:864
Spanworm, walnut, report on (Coquillet). 1897. p. 64 .....	A9.6:7
Sparganum mansonii. <i>See</i> Larval cestode.	
Spark-arresters, importance of (Tilton). 1887. p. 136 .....	A13.3:1
Sparrows:	
Destruction of, by poisons (Fisher). 1889. p. 174 .....	A5.3:1
Relation of, to agriculture (Judd). 1901 .....	A5.3:15
Trapping of, for sporting purposes, with paper descriptive of ap- paratus and methods employed (Hill). 1889. p. 178 .....	A5.3:1
<i>See also</i> English sparrow — European tree sparrow — House sparrow.	
Sparrow hawk, special report on (Fisher). p. 491 .....	A1.1:888
Same. p. 491 .....	A5.1:888
Spartina:	
North American species of (Merrill). 1902 .....	A19.3:9
Notes on. 1869. p. 136 .....	A27.9:7
Specific gravity:	
Determination of, standard temperatures for, report on. 1897. p. 137 .....	A7.3:51
Limits of, of cow's milk (Schrodt). 1888. p. 154 .....	A7.3:24
Rise in, determination of, on allowing milk to stand after milk- ing (Richmond). 1894. p. 191 .....	A7.3:43
Spectrum, absorption lines of, determination of relative quantities of aqueous vapors in atmosphere by means of (Jewell). 1896...	A29.3:16
Speculation v. industry. 1892. p. 134 .....	A27.9:30
Spencer, Guilford Lawson:	
Beet sugar, machinery and processes for manufacture of, recent improvements in. 1885. p. 106 .....	A7.3:5
Beet-sugar manufacture, utilization of residues from, in cattle feed- ing. 1898. p. 213 .....	A1.10:898
Kjeldahl method for determination of nitrogen. 1886. p. 36....	A7.3:12
Magnolia, sugar and sugar-cane data for four years at, summary of. 1887. p. 46 .....	A7.3:18
Sorghum sirup, manufacture of, circular on. 1894 .....	A7.4:1
Sorghum-sugar experiments by various companies in Kansas. 1889. p. 7 .....	A7.3:26
Sugar, manufacture of, at Magnolia Station, Lawrence, La., ex- periments in—	
2d report, season of 1885-6 .....	A7.3:11
3d report, 1886-7 .....	A7.3:15
same. p. 328 .....	A1.1:886
1889 .....	A7.3:21
Tea, coffee, and cocoa preparations, adulteration of. 1892. p. 875.	A7.3:13 <sup>1</sup>
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
<i>See also</i> , as revisor .....	
Spencer, John W. Young people attending farmers' institutes, how to interest and instruct. 1902. p. 42 .....	A10.3:110
Spencer, Samuel. Roads and railroads. 1902. p. 41 .....	A22.3:25
Sperk, Franz Otto. Siberia, four great rivers of. 1894. p. 101.....	A29.3:11 <sup>1</sup>

# Index

	Classification no.
Spermophile:	
Mississippi Valley (Bailey). p. 185.....	A1.1:892
same. p. 185.....	A5.1:892
New, from northwestern Arizona, description of (Merriam). 1889. p. 17.....	A5.5:2
New, from southern California, description of (Merriam). 1889. p. 15.....	A5.5:2
<i>See also</i> Squirrels.	
Spermophilus spilosoma group. <i>See</i> Ground squirrel.	
Spethmann, Miss Marie T. Land-grant colleges and agricultural experiment stations in United States, compilation of statistics of, for 1900.....	A10.3:97
Same, for 1901.....	A10.3:114
Sphærotheca, another, upon Phytoptus distortions (Halsted). 1889. p. 134.....	A28.5:5
Sphærotheca phytoptophila, notes upon (Halsted). 1889. p. 85...	A28.5:5
Sphingidæ, list of, taken by electric lamps at Poughkeepsie, N. Y. (Dyar). 1891. p. 322.....	A9.7:3
Spices, analysis of, provisional method for (Winton). 1902. p. 55..	A7.3:65
Spices and condiments, adulteration of:	
1886. (Richardson). p. 291.....	A1.1:886
1887. (Richardson). p. 129.....	A7.3:13 <sup>2</sup>
1896. (Lattimore). p. 296.....	A1.1:896
<i>See also</i> Peppers.	
Spider bites, fatal, contribution to literature of. 1889. p. 204.....	A9.7:1
Spider-egg parasites, two (Howard). 1890. pp. 269, 359.....	A9.7:2
Same (Howard). 1891. p. 202.....	A9.7:4
Spider parasites, external (Howard). 1888. pp. 42, 106.....	A9.7:1
Same, new (Ashmead). 1894. p. 259.....	A9.7:6
Spider webs, floating, note on (Abbe). 1898. p. 566.....	A29.6:28
Spiders:	
Poisonous, in Madagascar. 1890. p. 273.....	A9.7:2
Trap-door (Glover). 1873. p. 345.....	A27.9:11
<i>See also</i> Red spiders.	
Spikes, adhesion of, notes on (Fernow). 1887. p. 62.....	A13.3:1
Spillman, W. J.:	
Farmers' institute worker. 1902. p. 59.....	A10.3:120
Grass and Forage Plant Investigations Office, and Agrostology Division, lists of publications of. 1902.....	A19.2:P96
Grasses and forage plants for year 1901. p. 672.....	A1.10:901
Hybrid offspring, quantitative studies on transmission of parental characters to. 1902. p. 88.....	A10.3:115
Washington (State) farmers' institute work accomplished in. 1902. p. 43.....	A10.3:120
Spilogale. <i>See</i> Skunks, little striped.	
Spilosoma fuliginosa, report on (Lugger). 1890. p. 236.....	A9.7:2
Spinning cotton, atmospheric conditions favorable to (Abbe). 1900. p. 294.....	A29.6:28
Spiralis trichina, report on. p. 389.....	A1.1:869
Splenetic fever. <i>See</i> Texas or Southern cattle fever.	
Spokane, Wash., climate of, 1882-99 (Stewart). p. 490.....	A29.6:28
Spontaneous combustion, meteorological conditions favorable to, note on (Abbe). 1900. p. 249.....	A29.6:28
Spores of Agaricus campestris and other Basidiomycetous fungi, preliminary study of (Ferguson). 1902.....	A19.3:16
Spores of Hymenomycetes, method for preserving (Harz). 1889. p. 163.....	A28.5:5
Sporidia. <i>See</i> Fenestrate sporidia.	
Sporozoön in intestinal villi of cattle, notes on (Smith). 1893. p. 73.	A4.3:3
Spot disease of orchard grass (Trelease). p. 129.....	A1.1:886
Same. p. 129.....	A28.1:886
Spot disease of violet (Dorsett). 1900.....	A28.3:23
Spotting of peaches, report on (Smith). 1889. p. 32.....	A28.5:5
Sprague, Elizabeth C. <i>See</i> , as joint author, Bevier, Isabel.	
Sprague, G. Meat question analyzed. p. 462.....	A1.1:883
Sprague, Horatio J. Sausages, United States in Gibraltar. p. 519..	A4.1:899
Sprayer. <i>See</i> Japy knapsack sprayer—Kerosene knapsack sprayer.	



	<b>Index</b>
	<b>Classification no.</b>
<b>Spraying:</b>	
Devices for, new, circular on (Galloway). 1899.....	A28.4:17
Machinery for—	
manufacturers of, letter to.....	A10.4:17
standard fittings for (Alwood). 1891. p. 58.....	A9.7:4
Power sprayer for asparagus, report on (Sirrinc). 1901. p. 177..	A10.3:99
Pump, new, notes on (Galloway). 1891. p. 25.....	A28.5:6
Use of steam apparatus for (Howard). 1896. p. 69.....	A1.10:896
Without pump, preliminary notice (Aldrich)—	
1894. p. 114.....	A9.7:7
1895. p. 28.....	A9.6:2
<i>See also</i> Fruits—Knapsack sprayer.	
Spring, advent of (Herrmann). 1902. p. 69.....	A29.3:31
Spring wheat. <i>See</i> Wheat.	
Springfield, Mass., shade-tree insects of, and other New England cities (Howard). 1895. p. 40.....	A9.6:2
Springfield, Mo., storms at, local (Hazen). 1900. p. 201.....	A29.6:28
Spruce, insect enemies of, in Northeast (Hopkins). 1901.....	A9.6:28
Spruce-bark beetles, notes on (Weed and Fiske). 1898. p. 67.....	A9.6:17
Spruce pine (Mohr). 1896. p. 127.....	A13.3:13 <sup>1</sup>
Same. 1897. p. 137.....	A13.3:13 <sup>2</sup>
Sprung, A. Thermometers, on construction of registering air, to replace ordinary alcohol and mercurial thermometers. 1896. p. 718.....	A29.3:11 <sup>3</sup>
Squall, local, at West Berkeley, Cal., Dec. 11, 1894 (Abbe). p. 509.	A29.6:22
Squash. <i>See</i> Garden vegetables.	
Squash borer ( <i>Melittia cucurbitæ</i> ) remedies for (Smith). 1891. p. 30.	A9.7:4
Squash bug, common, circular relative to (Chittenden). 1899.....	A9.5:39
Squash-vine borer, circular relative to (Chittenden). 1899.....	A9.5:38
Squirrels, prairie ground, or spermophiles of Mississippi Valley (Bailey). 1893.....	A5.:34
<i>See also</i> Ground squirrels—Spermophile and references.	
Stable manure, value of. 1901. p. 5.....	A1.9:133
"Staggers," disease known as, among horses in Virginia and North Carolina (Harbaugh). p. 209.....	A4.1:886
Stalk worm, new enemy to young tobacco (Johnson). 1899. p. 99.	A9.6:20
Stalker, M. "Loco" plant and its effect on animals. p. 271.....	A4.1:886
Stall feeding cattle and sheep (Harris). p. 317.....	A1.1:862
Standard Oil Company, meteorological observations during burning of plant of, at Bayonne, N. J., July 5, 6, and 7, 1900 (Mitchell). p. 325.....	A29.6:28
Standard Sugar Refinery, Alvarado, Cal., report on (Furnas). 1892. p. 91.....	A1.8:20
Standard time. <i>See</i> Time.	
Standards, National Bureau of, circular of information relating to (Marvin). 1902. p. 135.....	A29.6:30
Standart, S. H. Live-stock industry of Colorado and Territories of Northwest. p. 326.....	A4.1:885
Stanley, W. E. Kansas, road improvement in, extract from governor's message. p. 4.....	A22.4:33
Stannard, J. D. <i>See</i> , as joint author, Johnston, C. T.	
Stanton, Edgar. Nettle, cultivation of, in Germany. p. 560.....	A1.1:878
Stapleton, D. C. Climatological data from Playa Rica, Ecuador. 1898. p. 460.....	A29.6:26
<b>Starch:</b>	
Determination of, comparison of methods (Stone). 1894. p. 162.	A7.3:43
Enzymic ferments upon (Stone). 1896.....	A10.3:34
Estimation of, report on (Browne). 1899. p. 92.....	A7.3:57
Factories in Maine (Boardman). 1885. No. 19. p. 23.....	A27.9:23
Manufacture of—	
from potatoes and cassava (Wiley). 1900.....	A7.3:58
in Maine. 1886. p. 22.....	A27.9:24
Plants and animals (Taylor)—	
1875. p. 316.....	A27.9:13
1876. p. 196.....	A27.9:14
Sweet potato as producer of. 1899. p. 26.....	A1.9:87
<i>See also</i> Dextrine—Potatoes.	

# Index

	Classification no.
Starling, William. Mississippi River, floods of, with reference to inundation of alluvial valley. 1894. p. 68.....	A29.3:11 <sup>1</sup>
Starnes, H. N. Mycophagy, importance of, in a course of botanical instruction. 1898. p. 75 .....	A10.3:49
Starr, Frederick. Forests, American, their destruction and preservation. p. 210 .....	A1.1:865
Stars:	
Heat radiation of, note on (Abbe). 1899. p. 472 .....	A29.6:27
Shooting—	
hints to observers of (Harkness). 1899. p. 9.....	A29.6:27
observation of (Abbe). 1901. p. 420.....	A29.6:29
State live-stock sanitary boards, secretaries of State boards of health, and State veterinarians having control of contagious and infectious diseases among domestic animals, list of. 1898. p. 603.....	A4.1:898
Same, 1899, p. 530 .....	A4.1:899
State veterinarians and secretaries of sanitary boards, list of:	
1898. p. 616 .....	A1.10:898
1899, p. 698 .....	A1.10:899
1900, p. 653 .....	A1.10:900
1901, p. 628 .....	A1.10:901
State weather services:	
Characteristics of Utah in relation to State weather-service work (Salisbury). 1894. p. 27.....	A29.3:14
Functions of (Dunwoody). 1894. p. 9.....	A29.3:11 <sup>1</sup>
Importance and equipment (Mitchell). 1896. p. 44.....	A29.3:18
Irrigation and its relation to (Salisbury). 1894. p. 24.....	A29.3:14
Monthly notes on, July, 1891–March, 1895; June–August, 1895...	A29.6:
Organizations of (Dunwoody). 1895. p. 285.....	A29.3:11 <sup>2</sup>
Statistics of (Fassig). 1895. p. 209.....	A29.6:23
<i>See also</i> Climate and crop service—Weather Bureau.	
State Weather Services, American Association of, proceedings of:	
1st annual meeting, 1892 .....	A29.3:7
2d annual meeting, 1893 (Berry). p. 228.....	A29.6:21
3d annual meeting, 1894.....	A29.3:14
4th annual meeting, 1895.....	A29.3:18
same, announcement of, 1895 .....	A29.6:23
States:	
Agriculture reports of. <i>See</i> Agriculture.	
Forest condition of (Baker). 1884. p. 181.....	A13.5:4
Geologists of, circular letter to, requesting cooperation with Office of Road Inquiry, Agriculture Department.....	A22.4:4
Governors of, extracts from messages of, relating to good roads (Stone). 1895.....	A22.3:14
Laws relating to management of roads, enacted 1888–93 (Stone) ..	A22.3:1
same, 1894–95 (Stone).....	A22.3:18
War debts of. 1866. p. 93 .....	A27.9:4
Weights and measures of, systems of, explained. p. 218.....	A1.1:871
States and Territories:	
Governors of, circular letter to, requesting cooperation with Office of Road Inquiry, Agriculture Department.....	A22.4:1
same, to secretaries of state .....	A22.4:2
Laws of, for control of contagious animal diseases—	
1885. p. 471 .....	A4.1:885
1886. p. 303 .....	A4.1:886
1890 (additional). p. 457 .....	A4.1:889–90
1892 (additional). p. 381 .....	A4.1:891–2
1894 (additional). p. 103 .....	A4.1:893–4
1896 (additional). p. 333 .....	A4.1:895–6
1897. p. 419 .....	A4.1:897
1899. p. 732 .....	A4.1:899
1901 .....	A4.3:43
Laws of, on irrigation and water rights, abstract of (Critchett). 1893 .....	A15.3:1
<i>See also</i> Atlantic States—Eastern States.	
Statesville area, North Carolina, soil survey of (Dorsey and party). p. 273.....	A26.5:901 <sup>1</sup>

Static electricity. <i>See</i> Electricity.	
Statistical Institute, International. 1887. p. 247 .....	A27.9:25
Statistical reports, Statistics Division, Agriculture Department .....	A27.9:
Statistician, Agriculture Department, synoptical index to reports of, 1863-1894 (Thompson). 1897 .....	A21.3:2
Statistics, agricultural, of United States, album of (Dodge) .....	A27.2:St2
Statistics Division, Agriculture Department:	A27.
Work of, for farmer (Hyde). 1897. p. 258 .....	A1.10:897
same, reprinted with title "Of What Service are Statistics to Farmer?" .....	A27.8:14
Statistics in agriculture. 1882. No. 49. p. 23 .....	A 27.9:20
Stave silo, value of, to dairy farmer (Beal). 1898. p. 23 .....	A1. 9:103
Steam, cultivation by:	
History of American inventions for (Brainerd). p. 253 .....	A1.1:867
Note on (Lawrence). 1878. p. 358 .....	A27.9:10
Progress in (Curtiss). p. 263 .....	A1.1:867
same, 1869. p. 296 .....	A1.1:869
Steam plowing:	
England. 1873. p. 364 .....	A27.9:11
Louisiana (Lawrence). p. 278 .....	A1.1:867
New Jersey. 1869. p. 224 .....	A27.9:7
Profit of (Lawrence). 1870. p. 149 .....	A27.9.8
Steam plows:	
American, report on. p. 305 .....	A1.1:869
International competition of. 1884. No. 9. p. 44 .....	A27.9:22
Stearns, Herman De C. Sea, effect of proximity to, on thunderstorm periods. 1898. p. 452 .....	A29.6:26
Stearns, Robt. Edwards Carter. Shells, land and fresh water, col- lected in California and Nevada by Death Valley expedition, including few additional species obtained by Clinton Hart Merriam and assistants in parts of southwestern United States, 1893. p. 269 .....	A5.5:7
Steddom, Rice P.:	
Cattle, disease among, in Marshall County, Kansas. p. 382 .....	A4.1:898
Cattle of Porto Rico. p. 512 .....	A4.1:899
Steel track wagon roads. <i>See</i> Roads.	
Steele, Edward Strieby. Perfumery farming, can it succeed in U. S.?.	A1.10:898
Steele, J. P. Cotton insects, report on. 1885. App., p. 25 .....	A8.1:4
Steer beef. <i>See</i> Beef.	
Steers:	
Fat, note on. 1870. p. 150 .....	A27.9:8
Feeding experiments with, to ascertain comparative value of corn and red and white kafir corn (Georgeson). p. 483 .....	A4.1:898
Feeding sheaf wheat to (French). p. 486 .....	A4.1:898
Grazing, on corn and cowpeas (Langworthy). 1901. p. 27 .....	A1.9:124
Steiner, Ralph. Munich, Germany, cost of hauling farm products over wagon roads at. p. 9 .....	A22.4:27
Stejneger, Leonhard:	
Reptiles and batrachians—	
collected by Death Valley expedition in 1891, annotated list of, with descriptions of new species, and field notes by Clinton Hart Merriam. 1893. p. 159 .....	A5.5:7
collected by Clinton Hart Merriam and party in Idaho, 1890, annotated list of. 1891. p. 109 .....	A5.5:5
collected by Clinton Hart Merriam and Vernon Bailey on San Francisco Mountain plateau and desert of Little Colorado, Arizona, annotated list of, with description of new species. 1890. p. 103 .....	A5.5:3
Tres Marias and Isabel Islands, reptiles of. 1897. p. 63 .....	A5.5:14
Stem-girdler. <i>See</i> Currant stem-girdler.	
Stephens, Lon V. Missouri, road improvement in, extract from governor's message. p. 5 .....	A22.4:33
Sterilization. <i>See</i> Milk.	
Sterling, Kans.:	
Sorghum culture at (Denton). 1891. p. 78 .....	A7.3:34
Sorghum sugar experiments at— 1887 (Denton). p. 57 .....	A7.3:17

# Index

	Classification no.
<b>Sterling, Kans.—Continued</b>	
<b>Sorghum sugar experiments at—Continued</b>	
1888 (Denton and Crampton). p. 287.....	A1.1:888
same. p. 105.....	A7.3:20
1888 (Wiley). p. 14.....	A7.3:20
1889 (Denton and Crampton). p. 82.....	A7.3:26
1892 (Fuelling). p. 30.....	A7.3:37
1892 (Denton). p. 76.....	A7.3:37
Stern, Louis. Germany's wool import. p. 520.....	A4.1:899
Stetson, Ezra. Swine breeding, address on. 1883. p. 160.....	A1.7:2
Stetson, Frank O.:	
Climate of Baguio, Philippine Islands. 1902. p. 478.....	A29.6:30
Hurricanes of 1895 and 1896 in Philippine Archipelago. p. 101..	A29.6:28
Stettin, Germany:	
Cost of hauling farm products over wagon roads at (Kickbusch).	
p. 9.....	A22.4:27
International fair at, 1865 (Klippart). No. 7. p. 6.....	A27.9:3
Stevens, James S. Atmidometry, some experiments in. 1902.	
p. 129.....	A29.6:30
Stevenson, J. C., address of, before National Road Conference.	
July, 1894. p. 22.....	A22.3:10
Stewart, Charles. Climate of Spokane, Wash., 1882-1899. p. 490 ..	A29.6:28
Stewart, E. W.:	
Cattle feeding in New York. p. 299.....	A1.1:876
Food, cutting and cooking, for animals. p. 396.....	A1.1:865
Stewart, John. See, as joint author, Gardner, Frank Duane.	
Stibadium spumosum, habits of (Murtfeldt). 1894. p. 301.....	A9.7:6
Stickney, L. D. Florida, soil, climate, and productions. p. 59.....	A1.1:862
Stigmonose, disease of carnation and other pinks (Woods). 1900...	A28.3:19
Stiles, Charles Wardell:	
Country slaughter-house as a factor in spread of disease. 1896.	
p. 155.....	A1.10:896
Disinfection of kennels, pens, and yards by fire. 1902. p. 15 ...	A4.3:35
Eimeriella, new genus of coccidia. 1902. p. 18.....	A4.3:35
Flukes and tapeworms of cattle, sheep, and swine with special	
reference to inspection of meats. 1898. p. 11.....	A4.3:19
Frogs, toads, and carp ( <i>Cyprinus carpio</i> ) as eradicators of fluke	
disease. p. 220.....	A4.1:901
Hepatic coccidia of rabbits, <i>Eimeria stiedæ</i> , correct name for.	
1902. p. 18.....	A4.3:35
Hookworm disease (uncinariasis or anchylostomiasis) in man,	
significance of recent American cases of. p. 183.....	A4.1:901
Roundworms in sheep, goats, and cattle, treatment of. 1901 ...	A4.1:35
same. 1902. p. 7.....	A4.3:35
Sarcosporidia, presence of, in birds. 1893. p. 79.....	A4.3:3
Strongyle, Egyptian and Japanese ( <i>Strongylus subtilis</i> ), which	
may possibly occur in returning American troops. 1902. p.	
41.....	A4.3:35
Tapeworms of poultry, present knowledge of. 1896.....	A4.3:12
Trematodes ( <i>Monostomulum lentis</i> and <i>Agamodistomum ophthal-</i>	
<i>mobium</i> ) parasitic in the human eye. 1902. p. 24.....	A4.3:35
Trichinosis in Europe of alleged American origin. 1901. p. 156.	A4.3:30
Trichinosis in Germany, general remarks on. 1901. p. 9.....	A4.3:30
same, statistical review, during 1881-1898. 1901. p. 35.....	A4.3:30
Verminous disease of cattle, sheep, and goats in Texas. p. 356...	A4.1:900
same, further investigations. p. 223.....	A4.1:901
See also, as joint author, Salmon, Daniel Elmer.	
Stiles, Charles Wardell, and Frankland, W. Ashby. Vinegar eel	
( <i>Anguillula aceti</i> ) infection in human bladder, case of. 1902.	
p. 35.....	A4.3:35
Stiles, Charles Wardell, and Hassall, Albert:	
Bananas, partially digested, spurious parasitism due to. 1902.	
p. 56.....	A4.3:35
Cestodes, adult, of cattle, sheep, and allied animals, revision of.	
1893.....	A4.3:4
Host, color of, and its relation to parasitism. 1892. p. 265.....	A9.7:4
Parasites (50-52), notes on. p. 558.....	A4.1:899

<b>Stiles, Charles Wardell, and Hassall, Albert—Continued</b>	
Parasites, notes on. 1902. p. 19 .....	A4.3:35
Parasites, notes on: 55, <i>Spinosa</i> ear tick; 56, <i>Boophilus australis</i> ; 57, new host for <i>Strongylus contortus</i> and <i>Cysticercus tenuicollis</i> . 1901 .....	A4.4:34
Zöology, medical and veterinary, index catalogue of. 1902.....	A4.3:39
<b>Stiles, Charles Wardell, and Tayler, Louise:</b>	
Cestode, adult ( <i>Diplogonoporus grandis</i> ), of man which may possibly occur in returning American troops. 1902. p. 43 .....	A4.3:35
Larval cestode ( <i>Sparganum mansoni</i> ) of man which may possibly occur in returning American troops. 1902. p. 47 .....	A4.3:35
<b>Stillwell and Gladding:</b>	
Fertilizer samples for analysis, preparation of, notes on. 1893. p. 19 .....	A7.3:38
Phosphate, concentrated, notes on analysis of. 1893. p. 18 .....	A7.3:38
<b>Stipa. See Melica and Stipa.</b>	
<b>Stock:</b>	
Crops and, in Ontario. 1890. p. 484 .....	A27.9:28
Diseases of, in Europe. 1869. p. 65.....	A27.9:7
Epizootic aphthæ among; nature, causes, treatment, etc. p. 352.	A1.1:870
Feeding experiments, significance of (Curtiss). 1899. p. 116 ...	A10.3:65
Food for. See Plants.	
Ontario. 1890. p. 484.....	A27.9:28
Plants poisonous to—	
preliminary catalogue of (Chesnut). p. 387 .....	A4.1:898
preliminary report (Chesnut and Wilcox). 1901 .....	A7.3:26
report on (Wilcox). p. 91.....	A4.1:900
Pure-bred, business of breeding (Craig). p. 416 .....	A4.1:901
Raising in Mississippi. 1869. p. 297* .....	A27.9:7
Raising of, directory of departments, boards, societies, colleges, and other organizations in interest of. 1885 .....	A1.8:39
Sales of, 1870. p. 481.....	A27.9:8
<i>See also</i> Farm animals — Farm stock — Live stock.	
<b>Stock ranges:</b>	
Northern, some poisonous plants of (Chesnut). 1900. p. 305 ...	A1.10:900
Northwestern California, notes on grasses and forage plants and range conditions (Davy). 1902.....	A19.3:12
<i>See also</i> Range.	
<b>Stock yards, Union. See Chicago.</b>	
<b>Stockbridge, H. E. Florida, farmers' institute work accomplished in. 1902. p. 17.....</b>	
<i>See also</i> Waldron, C. B.	
Stockholm, dead animals in, disposition of (Winslow). p. 360 .....	A4.1:899
<b>Stockman, William B.:</b>	
Climatology of Havana, Cuba, monthly notes on Apr.—July, Sept.—Oct., Dec., 1901; Feb.—Apr., 1902.....	A29.6:
Meteorological tables and charts, monthly, description of, May—Oct., 1902 .....	A29.6:30
Weather Bureau service, monthly reports of, in West Indies, 1899. p. 194 .....	A29.6:27
Weather of the month, May—Oct., 1902.....	A29.6:30
<b>Stockmen, national convention of. See Chicago, Ill.</b>	
<b>Stohmann, F. Heat equivalent of nutrients of food; translated by Charles Ford Langworthy. 1896. p. 590 .....</b>	
<b>Stokes, A. W. Milk, fat in, determination of, by Werner-Smith method. 1890. p. 158.....</b>	
<b>Stokes, John W. Report as Acting Commissioner of Agriculture, 1867 .....</b>	
<b>Stomach staggers. See Cattle.</b>	
Stomachs of birds, directions for collecting. 1891.....	A5.4:12
Stomata, strange developments of, on <i>Carya alba</i> , caused by <i>phylloxera</i> (Owen). 1892. p. 327.....	A9.7:4
<b>Stone, G. E.:</b>	
Botanists at agricultural experiment station, functions of. 1901. p. 138 .....	A10.3:99
Vegetable physiology in agricultural colleges. 1896. p. 99.....	A10.3:41

\* By a misprint, this page number appears twice.



# Index

	Classification no.
Stone, Richmond. Road building, national, in United States, historical sketch of. 1895. p. 7.....	A22.3:17
Stone, Roy:	
Address of—	
before national road conference, July, 1894. p. 7.....	A22.3:10
before Virginia good roads convention, Oct. 18, 1894. p. 14...	A22.3:11
Addresses on road improvement in Maine, New York, North Carolina, and Illinois. 1897.....	A22.4:28
Agriculture in Porto Rico. 1898. p. 505.....	A1.10:898
Convict labor, use of, on highways. p. 11.....	A22.3:16
Convicts, employment of, in connection with road building.....	A22.3:16
Earth roads, hints on their construction and repair. 1894.....	A22.3:8
Higbie State aid road bill, remarks at hearing by committee of senate and assembly at Albany, N. Y., Feb. 25, 1897. p. 10..	A22.4:28
Illinois Farmers' Institute, letter to, on road improvement. 1897. p. 23.....	A22.4:28
Object-lesson roads. 1897. p. 373.....	A1.10:897
Report of, before convention of National League for Good Roads. Washington. 1893. p. 13.....	A10.3:14
Road building in U. S.—	
historical and technical papers on. 1895.....	A22.3:17
report on. 1895. p. 45.....	A22.3:17
Road construction, cooperative. 1895. p. 487.....	A1.10:895
Road improvement—	
address on, at Raleigh, N. C., Feb. 5, 1897. p. 19.....	A22.4:28
addresses on. 1894.....	A22.4:14
necessity of Congressional action in. 1902. p. 23.....	A22.3:25
Road improvement in Maine, New York, North Carolina, and Illinois, address on. 1897.....	A22.4:28
Road Inquiry Office, Agriculture Department, work of, for farmer. 1897. p. 175.....	A1.10:897
Road making at agricultural colleges and experiment stations, letter relative to cooperation of Road Inquiry Office in aid of...	A22.2:Ag8
Roads—	
best, for farms and farming districts. 1894. p. 501.....	A1.10:894
good; extracts from messages of governors. 1895.....	A22.3:14
good, work for new century. 1901. p. 52.....	A22.3:21
State laws relating to management of roads—	
1888-93.....	A22.3:1
1894-95.....	A22.3:18
Wheelmen, American League of, remarks at good-roads banquet of, at Albany, N. Y., Feb. 11, 1897. p. 15.....	A22.4:28
Wide tires, laws of certain States relating to. 1895.....	A22.3:12
<i>See also</i> for reports as Special Agent and Engineer for Road Inquiry, 1893 to 1896; Director of Office of Road Inquiry, 1897, and Director of Office of Public Road Inquiries, 1899.....	A22.1:
Stone, Winthrop Ellsworth:	
Carbohydrates of wheat, maize, flour, and bread, and action of enzymic ferments upon starches of different origin. 1896.....	A10.3:34
Dietary studies at Purdue University in 1895.....	A10.3:32
Feeding stuffs, pentaglucooses in, notes on occurrence and quantitative estimation of. 1890. p. 125.....	A7.3:28
Starch, determination of, comparison of methods for. 1894. p. 162.....	A7.3:43
Stone fruits. <i>See</i> Fruits.	
Stone roads. <i>See</i> Roads.	
Stones. <i>See</i> Marble—Semaquir.	
Storage battery, use of, for electrical recording instruments (Vose) 1899. p. 300.....	A29.6:27
Storer, Bellamy. Horses, American, in Belgium. 1897. p. 24....	A1.2:H78
Storm bulletins.....	A29.17:
Storm glass, chemical (Abbe). 1895. p. 421.....	A29.6:23
Storm signals on Great Lakes (Cox). 1899. p. 152.....	A29.3:24
<i>See also</i> Weather Bureau signals.	
Storm-warning lanterns, substitution of acetylene gas for oil in (Richardson). 1902. p. 154.....	A29.3:31



Storm-warning messages (Form 1043C), should [they] be of some distinctive color to more readily attract attention? (Glenn). 1899. p. 53 .....	A29.3:24
Same (Jennings). 1899. p. 53 .....	A29.3:24
Storm-warning services of Weather Bureau. <i>See</i> Climate and crop and storm-warning services of Weather Bureau.	
Storm warnings:	
Forecasts and, how Weather Bureau disseminates (Calvert). 1896. p. xxii.....	A29.1:896
Monthly notes on—	
Oct., 1897–Apr., 1898 (Dunwoody) .....	A29.6:
May, 1898 (Morrill). p. 195.....	A29.6:26
June–Aug., 1898 (Bigelow) .....	A29.6:26
Sept., 1898–Oct., 1902 (Garriott) .....	A29.6:
Oregon coast, note on (Abbe). 1900. p. 211.....	A29.6:28
Storm warnings and displays by flag and lantern; are present, best that can be devised for Atlantic and Gulf coasts? (Smith). 1899. p. 27.....	A29.3:24
Same (McAdie). 1899. p. 29 .....	A29.3:24
Storm waves:	
Great Lakes and ocean (Abbe). 1895. p. 341.....	A29.6:23
Note on (Abbe). 1900. p. 154.....	A29.6:28
South Carolina and Texas (Alexander). 1900. p. 381 .....	A29.6:28
What is a storm wave? (Kimball). 1901. p. 460 .....	A29.6:29
Storms:	
Approaching, effect of, upon song birds (Linney). 1898. p. 354. ....	A29.6:26
August 2, 1899, notes on (Abbe). p. 365.....	A29.6:27
Benefits and injuries due to, note on (Abbe). 1900. p. 114 .....	A29.6:28
Centers in Pacific, notes on (Abbe). 1899. p. 114.....	A29.6:27
Cold weather, of India and America (Abbe). 1894. p. 295.....	A29.6:21
Distant, indicated by tides at New York (Jones). 1894. p. 372. ....	A29.6:22
Dust—	
and red rain, notes on (Abbe). 1901. p. 120 .....	A29.6:29
note on (Kimball). 1902. p. 269 .....	A29.6:30
Electric—	
California (Barwick). 1897. p. 539.....	A29.6:25
Kansas, notes on (Abbe). 1898. p. 216 .....	A29.6:26
Sacramento, Cal., notes on (Abbe). 1897. p. 542.....	A29.6:25
Equinoctial, notes on (Abbe). 1900. p. 558.....	A29.6:28
same (Kimball). 1901. p. 508 .....	A29.6:29
Fake, report on (Abbe). 1897. p. 307.....	A29.6:25
Forecasts of, commercial importance of, notes on (Abbe). 1900. p. 550.....	A29.6:28
Great storm of Oct. 1896 [1895], in Gulf of California (Abbe). 1895. p. 379 .....	A29.6:23
Hail and thunder in Oregon, notes on (Abbe). 1901. p. 262 ...	A29.6:29
Honolulu to Iowa, notes on (Abbe). 1899. p. 362.....	A29.6:27
Ice, note on (Abbe). 1900. p. 154 .....	A29.6:28
Local—	
do they follow river valleys? (Abbe). 1899. p. 363 .....	A29.6:27
heavy rainfall in, notes on (Abbe). 1900. p. 207 .....	A29.6:28
in United States during 1890, 1891, and 1892 (Hazen). p. 505. ....	A29.1:891 <sup>a</sup>
monthly report on, July, 1895–Sept., 1897 (Henry) .....	A29.6:
same, in Kansas, Sept. 8, 1895 (Abbe). p. 338 .....	A29.6:23
severe, 1895. p. 245 .....	A29.1:896
Springfield, Mo. (Hazen). 1900. p. 201 .....	A29.6:28
violent, of Sept. 21, 1894 (Hazen). p. 369 .....	A29.6:22
west coast of Mexico (Rogers). 1894. p. 510.....	A29.6:22
Malta during Oct., 1898 (Grout). p. 546.....	A29.6:26
March, 1888 and 1900, notes on (Abbe). p. 110 .....	A29.6:28
Mountain—	
note on (Abbe). 1897. p. 307.....	A29.6:25
same (Abbe). 1898. pp. 19, 66 .....	A29.6:26
peculiar (Struble). 1897. p. 212.....	A29.6:25
North Atlantic, monthly notes on, July, 1891–Dec., 1893 .....	A29.6:
Origin of (Abbe). 1894. p. 512.....	A29.6:22
Ponta Delgata, Azores, Dec. 8, 1894 (Abbe). p. 508 .....	A29.6:22

# Index

	Classification no.
<b>Storms—Continued</b>	
Silent electrical and dust, in Oklahoma, Jan., 1895 (Abbe). p.13.	A29.6:23
Sleet, note on (Abbe). 1900. p. 113	A29.6:28
Sleet and snow, memorable, notes on (Abbe). 1900. p. 548	A29.6:28
South Atlantic (Pinheiro). p. 204	A29.3:11 <sup>1</sup>
Texas, study of (Hazen). 1895. p. 54	A29.6:23
Tornadoes and, severe local, chronological list of. 1896. p. 308	A29.1:897
same, 1897. p. 301	A29.1:898
Track of and weather forecasting (Bigelow). 1897	A29.3:20
Track of periodic and nonperiodic fluctuations in latitude of (Veeder). 1894. p. 185	A29.3:11 <sup>1</sup>
Tropical, of Gulf of Mexico and Atlantic Ocean in September, 1895 (Garriott). p. 167	A29.6:23
Types of, in January, 1895 (Garriott). p. 9	A29.6:23
<b>Violent—</b>	
in United States—	
1893 p. 317	A29.1:893 <sup>2</sup>
1894 (Hazen). 1895. p. 283	A29.1:894
of March 23, 1893 (Hazen). p. 90	A29.6:21
Wells and, note on (Abbe). 1900. p. 293	A29.6:28
West Indian, relative intensity of (Hazen). 1894. p. 333	A29.6:21
Year, report on (Garriott). 1899. p. 208	A1.1:898
same, p. 27	A29.1:898
Yucatan, note on (Abbe). 1900. p. 155	A29.6:28
<i>See also</i> Baguios — Norther — Northwesters — Ocean storms — Sand blizzard — Thunderstorms — Tornadoes.	
<b>Stout, O. V. P.:</b>	
Irrigation under Great Eastern Canal, Platte County, Nebr.:	
1900. p. 195	A10.3:104
1901. p. 299	A10.3:119
Nebraska, duty of water in. 1900. p. 149	A10.3:86
<b>Stover, Arthur P.:</b>	
Irrigation in—	
Arkansas Valley, Colorado. 1902. p. 287	A10.3:119
Grand Valley, Colorado, 1901. 1902. p. 265	A10.3:119
valley of Bear River, in Utah, 1901. 1902. p. 243	A10.3:119
<b>Stowe, James G.:</b>	
Animal products in South Africa. p. 512	A4.1:898
Meat in South Africa. p. 512	A4.1:900
Prices in Cape Colony. p. 523	A4.1:898
<b>Strassburg, Germany:</b>	
International aeronautical conference at (Rotch). 1898. p. 158	A29.6:26
Meteorological balloon ascension at (Rotch), 1901. p. 298	A29.6:29
<b>Stratigraphy and hydrology of Nebraska (Hicks). 1890. p. 71</b>	A15.2:Ar7
<b>Straw or stover:</b>	
Composition and feeding value of. 1867. p. 374	A27.9:5
Proportion of grain to, effect of fertilizers on. 1897. p. 11	A1.9:56
<b>Strawberries:</b>	
Culture of (Hite). p. 139	A1.1:863
Enemy of (Glover). 1871. p. 479	A27.9:9
Fertilizer requirements of. 1902. p. 17	A1.9:149
Resistance of, to frost. 1901. p. 19	A1.9:133
Soils for. 1902. p. 16	A1.9:149
Strawberry crop and frosts, notes on (Abbe). 1899. p. 474	A29.6:27
Strawberry-leaf flea beetle in Indiana (Webster). 1891. p. 317	A9.7:3
Strawberry saw-fly, another (Malley). 1889. p. 137	A9.7:2
<b>Strawberry weevil:</b>	
Circular relative to (Chittenden). 1897	A9.5:21
Habits and remedies, supplementary notes (Chittenden). 1894. p. 14	A9.7:7
Injuries, notes on, and bibliography (Chittenden). 1898. p. 82	A9.6:10
Report of (Chittenden). 1893. p. 167	A9.7:5
<b>Streams:</b>	
Discharge of, during floods (Abbe). 1894. p. 255	A29.6:22
Headwaters of, forests on, preservation of (Read). 1884. p. 27	A1.7:5
<b>Street, John Phillips. Fertilizers, complete, nitric nitrogen in, Ulsch method in determining. 1892. p. 88</b>	A7.3:35

# Index

	Classification no.
Street cars, weather forecasts on (Conger). 1902. p. 206 .....	A29.3:31
Street sweepings, fertilizing value of (Ewell). 1898.....	A7.3:55
Streptococci; morphology, biology, and pathogenic properties of 28, found in investigation of animal diseases (Moore). 1893. p. 9.	A4.3:3
Streuli, William. Horgen, Switzerland, cost of hauling farm prod- ucts over wagon roads at. p. 12 .....	A22.4:27
Stripper butter, note on. 1898. p. 24 .....	A1.9:84
Strohm, John. Conestoga horse, brief history of. p. 175 .....	A1.1:863
Strohmer, —. Sugar beet, nitrates and phosphates in, physio- logical functions of. 1879. p. 281.....	A1.6:28
Strong, Charles M. Thunderstorms in Ohio during summer of 1892. p. 51 .....	A29.3:9
Strongyle, Egyptian and Japanese ( <i>Strongylus subtilis</i> ), which may possible occur in returning American troops (Stiles). 1902. p. 41 .....	A4.3:35
Struble, Joseph. Storms, mountain, peculiar. 1897. p. 212.....	A29.6:25
Stubble, constituents of (Brown). 1872. p. 311.....	A27.9:10
Stubble fields, pasturing pigs in. 1898. p. 20.....	A1.9:79
Stubbs, Charles E. Horses, demand for and kind of, suited for European uses; and present status of horse trade in different countries. 1898. p. 55 .....	A1.2:H78
Stubbs, Joseph Edward: Education— modern, what is of most worth in, address on. 1901. p. 32..	A10.3:99
theory of higher, some recent changes in. 1899. p. 97 .....	A10.3:65
Stubbs, William Carter: Agricultural resources and capabilities of Hawaii. 1901.....	A10.3:95
Sorghum sugar experiments at Kenner, Ia.— 1888. p. 273 .....	A1.1:888
same, with additional matter. 1888. p. 46.....	A7.3:20
1889. p. 64 .....	A7.3:26
Sugar analysis, report on. 1891. p. 76 .....	A7.3:31
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Student assistants. <i>See</i> Agriculture Department.	
Study, relation of technical to general course of (Fairchild). 1893. p. 67 .....	A10.3:16
Stupart, R. F.: Meteorological service of Canada. 1899. p. 204 .....	A29.6:27
Rainfall and charts of rainfall. 1902. p. 229.....	A29.6:30
Sturtevant, E. Lewis: Corn, varieties of. 1899 .....	A10.3:57
Deerfoot farm centrifugal dairy. p. 629.....	A1.1:880
Styles, George H. Port Carolina, South Australia, earthquakes, clouds, and gales at. 1902. p. 10 .....	A29.6:30
Suabian Alps, water supply of. 1875. p. 130.....	A27.9:13
Subha Rao, M. B. Rainfall in Madras, India, and frequency of sun spots. 1902. p. 438 .....	A29.6:30
Sublette, George B. Address of, before Minnesota good roads con- vention, January, 1894. p. 9 .....	A22.3:2
Sucrose. <i>See</i> Dextrine.	
Sudworth, George Bishop: Aborescent flora of U. S., nomenclature of. 1897 .....	A13.3:14
Forest flora, additions to, of North America, and necessary changes in nomenclature of important timber species, with notes. p. 325.....	A1.1:892
same, p. 325 .....	A13.1:892
Forest flora of Rocky Mountain region. 1888. p. 153.....	A13.3:2
Forest nursery, collection of tree seeds and propagation of seed- lings. 1900 .....	A13.3:29
Forest trees of United States, check list of. 1898.....	A13.3:17
Sugar: Adulteration of (Wiley and others). 1892. p. 633 .....	A7.3:13 <sup>6</sup>
Alcohol, use of, in manufacture of (Gilbee). 1891. p. 8 .....	A7.3:34
Analysis of— methods of; notes on (Wiley). 1890. p. 129.....	A7.3:28
notes on (Ross). 1889. p. 179.....	A7.3:24
recommendations for (Ewell). 1895. p. 152 .....	A7.3:47

# Index

	Classification no.
<b>Sugar—Continued</b>	
<b>Analysis of—Continued</b>	
remarks on report of committee on sugar, Association of Official Agricultural Chemists (Wiley). 1888. p. 54 .....	A7.3:19
report on (Stubbs). 1891. p. 76 .....	A7.3:31
same (Hiltner). 1898. p. 87 .....	A7.3:56
some facts relative to (Jungfleisch and Grimbert). 1890. p. 135 .....	A7.3:28
<i>See also</i> Chemical analysis, methods of—Sugar analysis, committee on.	
As food (Abel). 1899 .....	A1.9:93
Average price and consumption of—	
1895. p. 552 .....	A1.10:895
1896. p. 595 .....	A1.10:896
1897. p. 753 .....	A1.10:897
Consumption in United States. 1874. p. 47 .....	A27.9:13
Crop and weather, in island of Mauritius, 1880-96 (Abbe). p. 412 .....	A29.6:26
Crop of world, 1893-94. p. 32 .....	A27.9:32
Cuba, 1870-71. p. 326 .....	A27.9:9
Diffusion and carbonatation of, in Java, extracts from report on (Lucassen). 1885. p. 49 .....	A7.3:8
Estimation of—	
by Fehling's solution (Causse). 1890. p. 137 .....	A7.3:28
by weighing precipitated cuprous oxid as such and as metallic copper, notes on (Knight). 1901. p. 111 .....	A7.3:62
European production, 1877-90. p. 208 .....	A27.9:28
Evaporating apparatus for (Densmore). 1887. p. 57 .....	A7.3:17
same (Denton). 1887. p. 57 .....	A7.3:17
French production. 1875. p. 115 .....	A27.9:14
Imports of, 1856-61. No. 5. p. 4 .....	A27.9:1
Industry of United States; cane sugar, beet sugar, sorghum sugar, maple sugar (Wiley). 1885 .....	A7.3:5
Louisiana production, 1874-75. p. 456 .....	A27.9:13
Making in French West Indies. 1873. p. 25 .....	A27.9:11
Manufacture of, use of indigo-carmin in (McMurtrie). 1873. p. 33 .....	A27.9:11
Northern, industry, record of its progress during season of 1883 (Wiley) .....	
Proper mode of making. 1863. No. 3. p. 12 .....	A7.3:3
Quick estimation of, by one-tenth copper solution (Politis). 1890. p. 136 .....	A27.9:1
Statistics of—	
1894-1898. p. 712 .....	A1.10:898
1895-1899. p. 839 .....	A1.10:899
1896-1900. p. 858 .....	A1.10:900
Trade of United States, 1867-68. p. 16 .....	A27.9:7
World's production. 1886. p. 559 .....	A27.9:24
<i>See also</i> Beet sugar—Cane juices and sirups—Cane-sugar industry—Crops, principal—Des Linges sugar experiment station—Magnolia Station—Maize and sorghum sugars—Maple sugar—Pentaglucooses—Sirup—Sorghum sugar—Wiley, Harvey Washington.	
<b>Sugar analysis, committee on, Association of Official Agricultural Chemists, report of:</b>	
1888. p. 49 .....	A7.3:19
1892. p. 137 .....	A7.3:35
1893. p. 149 .....	A7.3:38
1894. p. 122 .....	A7.3:43
1895. p. 130 .....	A7.3:47
1901. p. 157 .....	A7.3:67
<b>Sugar beets:</b>	
Composition of, influence of environment upon (Wiley). 1901..	A7.3:64
Culture, seed development, manufacture, and statistics of (Wiley).	A1.9:52
Culture of—	
and manufacture of sugar therefrom in France and United States (McMurtrie). 1880 .....	A1.6:28

<b>Sugar beets—Continued</b>	
<b>Culture of—Continued</b>	
and manufacture of beet sugar (Wiley). 1890.....	A7.3:27
in France and Germany, notes on (Maxwell). 1890. p. 81..	A7.3:30
note on. 1867. p. 255 .....	A27.9:5
preliminary report on, near Portland, Me. (McMurtrie).	
1879. p. 171 .....	A1.6:28
same, final report on, in New England. 1879. p. 181....	A1.6:28
report on (Wiley). 1891.....	A1.9:3
successful, on alkali soils. 1899. p. 5 .....	A1.9:92
Diseases of, some (Townsend). 1902. p. 90 .....	A1.8:72
England. 1870. p. 484.....	A27.9:8
<b>Experiments with—</b>	
1890 (Wiley) .....	A7.3:30
1891 (Wiley and others) .....	A7.3:33
1892 (Wiley and Maxwell) .....	A7.3:36
1893 (Wiley and Maxwell) .....	A7.3:39
1897 (Wiley) .....	A7.3:52
Feeding value of. 1898. p. 15 .....	A1.9:84
Grown in various States, analyses of (Wiley) .....	A1.2:B39 <sup>3</sup>
same, p. 135 .....	A1.2:B39 <sup>1</sup>
Industry in United States. 1898. p. 8.....	A1.9:79
Introduction of (Fredericksen). 1879. p. 275 .....	A1.6:28
Literature of, exclusive of works in foreign languages (Barnett).	
1897 .....	A17.3:16
Nitrates and phosphates in, physiological functions of (Strohmer).	
1879. p. 281 .....	A1.6:28
Production of, in the Netherlands, 1866-82. No. 9. p. 46 .....	A27.9:22
Sweden (Andrews). 1872. p. 133 .....	A27.9:10
Wisconsin, experiments in (Woll). 1891. p. 90 .....	A7.3:33
<i>See also</i> Beet sugar—Schuyler, Nebr., Sugar-beet Experiment Station.	
Sugar-beet seed, production and testing (Pieters). 1902. p. 101....	A1.8:72
<b>Sugar-beet webworm:</b>	
Completed life history of (Howard). 1894. p. 369 .....	A9.7:6
Report of. 1893. p. 320.....	A9.7:5
<b>Sugar cane:</b>	
<b>Analysis of—</b>	
at Magnolia Station, Lawrence, La. 1888. p. 29 .....	A7.3:18
with table for calculation of analyses (Crampton). p. 31....	A7.3:15
same, at Fort Scott, Kans. (Crampton). 1887. p. 15.....	A7.3:17
Application of diffusion to extraction of sugar from (Wiley) .....	A7.3:8
<b>Cultivation of—</b>	
character and composition of soils best adapted to (Richardson).	
1886. p. 60.....	A7.3:10
in India. 1875. p. 135 .....	A27.9:13
<b>Deterioration of—</b>	
1866. p. 341 .....	A27.9:4
1872. (Watts). p. 211 .....	A27.9:10
Diffusion in its application to (Wiley). 1884 .....	A7.3:2
Diffusion process as applied to, in Louisiana (Sieg). p. 40 .....	A1.1:884
same. 1884. p. 18.....	A7.3:2
Insects in New South Wales (Koebele). 1892. p. 385 .....	A9.7:4
<b>Insects injurious to—</b>	
in Brazil, preliminary report of observations upon (Branner).	
1884. p. 63 .....	A9.3:4
report on (Comstock). 1881 .....	A1.6:35
Juices and sirups, filtration of, brown coal and wood char in	
(Thompson). p. 268 .....	A1.1:887
same. p. 99.....	A7.3:17
Manufacture of table sirups from (Wiley). 1902.....	A7.3:70
<i>See also</i> Sorghum.	
<b>Sugar-cane beetle injuring corn, note on:</b>	
1886. p. 32 .....	A9.3:12
1888. (Howard). p. 11.....	A9.7:1
<b>Sugar-cane borer:</b>	
Java (Zehntner). 1898. p. 32 .....	A9.6:10

# Index

	Classification no.
Sugar-cane borer—Continued	
Louisiana, life history of (Morgan). 1902. p. 128.....	A10.3:115
Sandwich Islands. 1888. p. 185 .....	A9.7:1
Sugar chemists:	
Committee of French Association of, potash, estimation of, abstract of report on. p. 43 .....	A7.3:16
French Association of, 1887, nitrogen in fertilizers, report of committee on. p. 54.....	A7.3:16
Sugar corn, chemical analysis of (McMurtrie). 1875. p. 176.....	A27.9:13
Sugar determinations, partial summary of, from sorgho canes and cornstalks. 1880. No. 25. p. 23.....	A27.9:18
Same. No. 27. p. 23.....	A27.9:18
Sugar factories, cost of, estimates of (Hughes). p. 252 .....	A1.1:887
Same, p. 73.....	A7.3:17
Sugar-producing plants, analysis of. 1888 .....	A7.3:18
<i>See also</i> Sugar and references thereunder.	
Sugar refinery. <i>See</i> Standard Sugar Refinery, Alvarado, Cal.	
Sugar region, Weather Bureau service, instructions governing (Berry) .	A29.12:C81
Sugar stations of Weather Bureau, instructions and code for enciphering reports at. 1892 .....	A29.12:C82
Sugarhouse machinery for sale by Agriculture Department, July 1, 1895 .....	A1.2:Su3 <sup>2</sup>
Sugar-yielding plants, "diffusion process" for extracting saccharine matter from. 1869. p. 457 .....	A27.9:6
Suint, utilization of. 1872. p. 234.....	A27.9:10
Sulphur:	
Loss of, in preparing ash of plants, report on (Fraps). 1901. p. 98.	A7.3:62
Metabolism of, in human organism, experiments on (Sherman). 1902 .....	A10.3:121
Use of, for blight or mildew on peaches and roses. 1867. p. 60..	A27.9:5
Sulphur rains, notes on (Abbe). 1898. p. 115 .....	A29.6:26
Sulphur wash. <i>See</i> San Jose scale.	
Sulphuric acid. <i>See</i> Cane-sugar manufactories.	
Sulphurous acid, use of:	
In manufacture of alcohol (McMurtrie). 1873. p. 32.....	A27.9:11
In purifying the diffusion juices of sugar cane and sorghum (Wiley).....	A7.3:8
Sulphurous oxide, effect of, on vegetation (McMurtrie). 1873. p. 32.	A27.9:11
Sumac:	
American—	
importations of. 1869. p. 377* .....	A27.9:7
report on. p. 230.....	A1.1:869
Culture of, in Sicily (McMurtrie). 1880.....	A1.6:26
Sumatra, tobacco in, cultivation of (Mulder). 1898.....	A1.8:58
Sumatra tobacco, growing, under shade in Connecticut Valley (Whitney). 1902 .....	A26.3:20
Summer:	
Cold, of 1816 (Abbe). p. 299.....	A29.6:23
Indian (Matthews). 1902. pp. 19, 69.....	A29.6:30
same (Wilson). 1902. p. 440.....	A29.6:30
Summerville, S. C., tea garden at, Government, condition, and prospects of (Saunders). p. 28.....	A1.1:881-2
<i>See</i> Pinehurst Experimental Tea Garden.	
Sun:	
Cosmical relations manifested in simultaneous disturbances of, aurora, and terrestrial magnetic field (Lemström). 1895. p. 492 .....	A29.3:11 <sup>2</sup>
Electrodynamic radiation from, endeavor to discover (Trowbridge). 1896. p. 409 .....	A29.6:24
Green-colored, of Sept. 9 and 10, 1883 (Abbe). p. 173 .....	A29.6:23
Periodic terms in meteorology due to rotation of, on its axis (Bigelow). 1895. p. 500 .....	A29.3:11 <sup>2</sup>
Total eclipse of, May 28, 1900—	
meteorological observations made to determine probable state of sky at several stations along path of (Bigelow). 1897. p. 394.....	A29.6:25

\* By a misprint, this page number appears twice.



Sun—Continued	
Total eclipse of, May 28, 1900—Continued	
notes on (Abbe). p. 110.....	A29.6:28
probable state of sky along path of (Bigelow). 1899.....	A29.3:27
same (Bigelow). p. 404.....	A29.6:26
Sun printing, Solandi (Halsted). 1894. p. 93.....	A10.3:20
Sun-spot cycle, relation of, to meteorology (Abbot). 1902. p. 178..	A29.6:30
Sun-spot period and temperature and rainfall of Jamaica (Hall). 1901. p. 503.....	A29.6:29
Sun spots:	
Frequency of, at Madras, India (Subha Rao). 1902. p. 438....	A29.6:30
Meteorology and, notes on (Abbe). 1901. p. 263.....	A29.6:29
Relative frequency of, 1749–1900 (Abbe). p. 505.....	A29.6:29
Relative numbers, Wolf's, revision of (Wolfer). 1902. p. 171..	A29.6:30
Report on (Lyons). 1897. p. 144.....	A29.6:27
Weather and, connection between (Bigelow). 1895. p. 91.....	A29.6:23
same (Kimball). 1901. p. 248.....	A29.6:29
Sunflower plant; its cultivation, composition, and uses (Wiley). 1901.....	A7.3:60
Sunflowers, cultivation of, for their seed and oil. 1898. p. 14.....	A1.9:78
Sunshine:	
Hourly results from self-registers for recording (Abbe). 1897. p. 252.....	A29.6:25
Local time of sunrise and sunset for north latitudes, from 25° to 49°, inclusive.....	A29.2:Su7 <sup>1</sup>
Measurement of—	
and preliminary examination of Angström's pyrheliometer (Marvin). 1901. p. 454.....	A29.6:29
use of selenium for (Dorsey). 1899. p. 99.....	A29.6:27
Monthly amounts of possible sunshine for hours ending shortly after sunrise and sunset. 1894.....	A29.2:Su7 <sup>1</sup>
Monthly notes on, Jan., 1894–Oct., 1902.....	A29.6:
Normal annual (Henry). 1898. p. 108.....	A29.6:26
Note on (Abbe). 1895. p. 426.....	A29.6:23
Recorders, care and management of (Marvin).....	A29.11:G <sup>2</sup>
Southern California agricultural experiment farm, near Pomona, Cal. (Henry). 1896. p. 237.....	A29.6:24
Temperatures in, notes on (Abbe). 1899. p. 310.....	A29.6:27
<i>See also</i> Climatic charts.	
Sunshine recorder:	
Glass electrical, instructions for using.....	A29.12:Su7
Improved, report on (Maring). 1897. p. 485.....	A29.6:25
Sunstroke in California and Arizona (Phillips). 1896. p. 454.....	A29.6:24
Sunstroke weather of August, 1896 (Phillips). p. 409.....	A29.6:24
Supan, Alexander. Rainfall, distribution of. p. 220.....	A29.6:30
Superstitions, meteorological (Abbe). 1898. p. 216.....	A29.6:26
Surface temperatures and North Atlantic currents (Hautreux). 1894. p. 192.....	A29.3:11 <sup>1</sup>
Surgical operations on cattle (Dickson and Lowe). p. 301.....	A4.2:C29 <sup>2</sup>
Surplus, American, and foreign trade. 1889. p. 159.....	A27.9:27
Surra:	
And allied trypanosomatic diseases, bibliography of (Hassall). p. 161.....	A4.1:901
same, p. 131.....	A4.3:42
Emergency report on (Salmon and Stiles). p. 41.....	A4.1:901
same.....	A4.3:42
<i>See also</i> Nagana — Mal de caderas — Trypanosomiasis.	
Suspended clay. <i>See</i> Clay.	
Svalöf, Sweden, station for plant breeding at (Fairchild). 1901. p. 814.....	A10.6:13
Swaim, James, Franklin kite club and (Abbe). 1897. p. 165.....	A29.6:25
Swalm, Albert W.:	
Bones and bone ash, export of, from Uruguay. p. 519.....	A4.1:900
Cattle, disease among, in Uruguay. p. 385.....	A4.1:898
Swamp and overflowed lands in California, reclamation of. p. 179..	A1.1:872
Swamp-land reclamation in California. 1872. p. 18.....	A27.9:10
Swamp soils. <i>See</i> Soils.	

# Index

	Classification no.
Swank, James Moore. Agriculture Department, history and objects. 1872 .....	A1.8:7
Swartz system of butter making in Sweden (Andrews). 1876. p. 198.	A27.9:14
Sweden:	
Agriculture in, statistics of. 1873. p. 259.....	A27.9:11
Butter making in, Swartz system of (Andrews). 1876. p. 198..	A27.9:14
Cooperative dairies in (Salviati). 1872. p. 452.....	A27.9:10
Crops in—	
report on. 1889. p. 538.....	A27.9:27
rotation of (Andrews). 1873. p. 363 .....	A27.9:11
Hog cholera in. p. 159 .....	A4.1:887-8
same, p. 168.....	A1.1:888
Insects of, notes on (Schöyen). 1897. p. 79.....	A9.6:9
Markets for American products in .....	A12.3:8
Milk flour in. p. 610.....	A4.1:901
Sugar beet in (Andrews). 1872. p. 133 .....	A27.9:10
<i>See also</i> Svalöf.	
Sweet Cassava. <i>See</i> Cassava, sweet.	
Sweet potato:	
As starch producer. 1899. p. 27 .....	A1.9:87
Culture and uses (Duggar) .....	A1.9:26
Culture of, at North, and modes of preserving through winter (Thompson). p. 220 .....	A1.1:862
Report on (Nesbit) .....	A1.9:129
Sweet-potato black rot (Halsted and Fairchild). 1891. p. 1 .....	A28.5:7
Sweet-potato saw-fly:	
New (Marlatt). 1892. p. 24.....	A9.7:5
Report on. 1888. p. 43.....	A9.7:1
Sweetland, Arthur E. Tornado at Hampton Beach, N. H., July 4, 1898. p. 308.....	A29.6:26
Sweetser, William S.:	
Food adulteration, report on. 1898. p. 78. ....	A7.3:56
Nitrogen determination, by Kjeldahl method, distilling with and without potassium sulphid. 1896. p. 25.....	A7.3:49
<i>See also</i> , as joint author, Bigelow, Willard Dell.	
Sweetwater River, Cal., problems of water storage on torrential streams of southern California, as typified by (Schuyler). 1901. p. 353 .....	A10.3:100
Swells. <i>See</i> Vegetables.	
Swendsen, George L.:	
Irrigation under canals from Logan River. 1902. p. 179.....	A10.3:104
Logan and Richmond canals in Utah, duty of water under. 1900. p. 211 .....	A10.3:86
Swenson, Magnus:	
Letters patent granted to, in process of making sugar. p. 242 ...	A1.1:887
same. p. 61.....	A7.3:17
Sorghum sugar, experiments at Fort Scott. p. 213.....	A1.1:887
same. p. 5.....	A7.3:17
Swine:	
Address on (Curtis). 1883. p. 148.....	A1.7:2
Breeding—	
address on (Stetson). 1883. p. 160 .....	A1.7:2
America. 1885. No. 25. p. 24 .....	A27.9:23
experiments in (Gurler). 1883. p. 155.....	A1.7:2
organization of. p. 423.....	A1.1:872
Crossing improved breeds of, with common hogs of Florida (Furnas). 1895.....	A4.4:4
Diseases of—	
epidemic—	
report on (Bolton). p. 135.....	A4.1:889-90
supplemental report on (Shakespeare). p. 137.....	A4.1:889-90
United States board of inquiry concerning, report of (Shakespeare and Burrill). 1891. p. 129.....	A4.1:889-90
infectious, additional investigations concerning. 1894.....	A4.3:6
inoculation as a preventive of. p. 58.....	A1.1:889
same. p. 16.....	A4.1:889-90
investigation of, etc.....	A1.6:12

**Swine—Continued**

<b>Diseases of—Continued</b>	
report on. p. 382.....	A1.1:877
reports from inspectors and correspondents. p. 375.....	A4.1:889-90
scientific investigations. 1890. p. 93.....	A1.1:890
same, p. 81.....	A4.1:889-90
special report, no. 12, review of (McGehee). 1879. p. 89....	A1.6:22
Epizootics among (Watts). 1872. p. 214.....	A27.9:10
Exportation of, from Boston, prohibition of. 1902.....	A4.5:100
Fecundity of. 1899. p. 23.....	A1.9:87
<b>Flukes and tapeworms of—</b>	
bibliography (Hassall). 1898. p. 145.....	A4.3:19
compendium, arranged according to their hosts (Hassall). 1898. p. 137.....	A4.3:19
report on, with special reference to inspection of meats (Stiles). 1898. p. 11.....	A4.3:19
<b>Imported into United States, regulations for inspection and quarantine of—</b>	
Dec. 28, 1899.....	A4.5:56
Jan. 27, 1900, modification.....	A4.5:58
June 1, 1900, amendment.....	A4.5:64
Oct. 20, 1900, amendment.....	A4.5:77
Nov. 10, 1900, amendment.....	A4.5:79
without quarantine. 1895. p. 29.....	A4.1:895-6
Kidney worm of, our present knowledge of (Tayler). p. 612....	A4.1:899
Losses of, by disease. 1886. p. 546.....	A27.9:24
Missouri, industry, and annual loss by disease (Bradley). p. 418.	A4.1:885
Nonspecific disease among, outbreak of (Moore). p. 219.....	A4.1:895-6
Quarantine of, in New England States. 1902.....	A4.5:99
Rearing and feeding in United States (Morrow). p. 405.....	A4.1:887-8
Tuberculosis in; nature of disease, with report of three cases (Moore and Dawson). p. 207.....	A4.1:895-6
White Chester breed of (Morris). p. 475.....	A1.1:865
<i>See also</i> Animals—Cattle orders—Farm animals—Hog chol- era—Live stock—Sows—Swine plague.	
<b>Swine Breeders' Associations, list of, with officers:</b>	
1898. p. 615.....	A1.10:898
1899. p. 696.....	A1.10:899
1900. p. 650.....	A1.10:900
1901. p. 626.....	A1.10:901
Swine fever, report on (Law). p. 420.....	A1.1:879
<i>See also</i> Swine plague.	
<b>Swine plague:</b>	
Cass County, Nebraska (Hines). 1879. p. 177.....	A1.6:12
Cause and prevention of (Smith). 1891.....	A4.2:Sw5
Florida (McGehee). 1880. p. 94.....	A1.6:22
(Hog cholera), investigation of (Salmon)—	
1884. p. 258.....	A1.1:884
same, with additional matter, p. 221.....	A4.1:884
1885. p. 476.....	A1.1:885
same, p. 184.....	A4.1:885
<i>See also</i> Hog cholera.	
Illinois (Detmers). 1880. p. 13.....	A1.6:22
Indiana (Voyles). 1879. p. 112.....	A1.6:12
same (Bitting). p. 199.....	A4.1:897
(Infectious pneumonia) investigation of—	
1886 (preliminary). p. 659.....	A1.1:886
same, p. 76.....	A4.1:886
1887. p. 491.....	A1.1:887
same, p. 86.....	A4.1:887-8
<i>See also</i> Salmon, Daniel Elmer.	
Investigation of, in Indiana (Voyles). p. 421.....	A1.1:878
Iowa (Dunlap). 1879. p. 135.....	A1.6:12
same (De Schweinitz). p. 501.....	A4.1:899
Ithaca, N. Y. (Law)—	
1879. p. 56.....	A1.6:12
1880. p. 68.....	A1.6:22

# Index

	Classification no.
Swine plague—Continued	
Ithaca, N. Y. (Law)—Continued	
1881. p. 81.....	A1.6:34
Jefferson County, Mo. (McNutt). 1879. p. 173.....	A1.6:12
Nebraska. p. 434.....	A4.1:885
North Carolina (Salmon). 1879. p. 123.....	A1.6:12
Ottawa, Ill. (Dyar). 1879. p. 156.....	A1.6:12
Outbreak of, in Maryland and Virginia (Rose). p. 446.....	A4.1:884
Prevention of. p.148.....	A4.1:887-8
Report on—	
1878 (Detmers). p. 321.....	A1.1:878
1879. p. 365.....	A1.1:879
1879 (Detmers). p. 19.....	A1.6:12
1880. p. 527.....	A1.1:880
1880 (Detmers). p. 153.....	A1.6:34
1880 (Law). p. 455.....	A1.1:880
1881. p. 316.....	A1.1:881-2
Serum treatment for (De Schweinitz). p. 235.....	A4.1:898
same.....	A4.3:23
Southwest, character of (Thornton). 1879. p. 84.....	A1.6:22
Variability of infectious diseases as illustrated by (Smith and Moore). 1894. p. 81.....	A4.3:6
Virginia (Payne). 1879. p. 165.....	A1.6:12
<i>See also</i> Hog cholera — Salmon, Daniel Elmer — Swine fever.	
Swine plague bacteria:	
Experiments on production of immunity in rabbits and guinea-pigs with reference to hog-cholera and (Smith and Moore). 1894. p. 41.....	A4.3:6
What becomes of hog-cholera and swine-plague bacteria when injected in small numbers into subcutaneous tissues of pigs? (Moore). 1894. p. 103.....	A4.3:6
Swingle, Walter Tennyson:	
Bordeaux mixture —	
improved method of making. 1891. p. 365.....	A28.5:7
its chemistry, physical properties, and toxic effects on fungi and algæ. 1896.....	A28.3:9
Central American coffee disease, danger of introducing, into Hawaii. 1898.....	A28.4:16
Date palm and its culture. 1900. p. 453.....	A1.10:900
Grain smuts—	
how caused and how to prevent. 1898.....	A1.9:75
their cause and prevention. 1894. p. 409.....	A1.10:894
Peronosporaceæ, some in herbarium of Vegetable Pathology Division. 1891. p. 109.....	A28.5:7
<i>See also</i> , as joint author, Kellerman, W. A.	
Swingle, Walter Tennyson, and Fairchild, David Grandison. Bur, or globe, artichokes, circular on. 1899.....	A6.4:22
Swingle, Walter Tennyson, and Webber, Herbert John:	
Citrous fruits, principal diseases of, in Florida. 1896.....	A28.3:8
Hybrids and their utilization in plant breeding. 1897. p. 383..	A1.10:897
Swinton, A. H.:	
Insect vivaria, how to be lighted? 1890. p. 18.....	A9.7:3
Locust swarms on coast of Great Britain. 1883. App., p. 57....	A8.1:3
Vanessa antiopa, stridulation in. 1889. p. 307.....	A9.7:1
Switzerland:	
Agricultural investigation in (Grete). 1896. p. 681.....	A10.6:6
Agriculture of. 1873. p. 568.....	A27.9:11
American horses in (Gifford). p. 503.....	A4.1:900
Farm stock in. 1866. p. 430.....	A27.9:4
Horses, cattle, etc., in (Du Bois). p. 520.....	A4.1:898
<i>See also</i> Horgen — St. Gall.	
Symons, George James:	
England, meteorological literature of, 1337-1699. 1895. p. 338..	A29.3:112
Thunderstorms, barometric oscillations during; and use of bromometer, an instrument designed to facilitate their study. 1901. p. 463.....	A29.6:29
Wind, effect of, on catch of rainfall. 1899. p. 454.....	A29.6:27

# Index

## Classification no.

Symons, George James, short biography of. 1900. p. 68 .....	A29.6:28
Syndicates, agricultural, of France. 1889. p. 523.....	A27.9:27
Syntomeida epilais, preparatory stages of (Dyar). 1890. p. 360....	A9.7:2
Syphus-fly, corn-feeding, report on. 1888. p. 5 .....	A9.7:1
Syracuse, N. Y., State fair, cattle for exhibition at, order providing for, June 26, 1902.....	A4.5:95
Systematic plant introduction. <i>See</i> Plant introduction.	
Tabanidæ (gadflies) and a very simple means of destroying them (Porchinski). 1899. p. 25 .....	A9.6:20
Table and kitchen wastes, importance of loss of. p. 25.....	A1.9:69
Table sirups, manufacture of, from sugar cane (Wiley). 1902.....	A7.3:70
Tachinidæ of America north of Mexico, revision of (Coquillett). 1897.	A9.8:7
Tæniasis, nodular, in fowls (Moore). 1895 .....	A4.4:3
Taft, L. R.: Apple scab, remedies for, experiments with. 1890. p. 30 .....	A6.3:11
Irrigation for garden and greenhouse. 1895. p. 233.....	A1.10:895
Michigan Farmers' Institute, work accomplished in. 1902. p. 35.....	A10.3:120
Talman, Charles Fitzhugh. People of Mars. 1900. p. 537.....	A29.6:28
Tamalpais, Mount: Fog studies on (McAdie). pp. 283, 492 .....	A29.6:28
same, pp. 24, 61, 104 .....	A29.6:29
Meteorological station, report on operation of, for Sept., 1897 (Hammon). p. 397 .....	A29.6:25
Observations, value of (Hammon). 1899. p. 56.....	A29.3:24
same (Pague). 1899. p. 63.....	A29.3:24
Weather Bureau instruments at, report on location and eleva- tion of (Hammon). 1898. p. 494.....	A29.6:25
Weather Bureau station on, notes on (Abbe). 1897. p. 493....	A29.6:25
Tamari, Kizo. Japan, rice and silk culture, and agriculture educa- tion in. 1885. p. 187 .....	A1.7:9
Tamias. <i>See</i> Ground squirrel.	
Tampico, Mexico, northers of (Abbe). 1893. p. 363.....	A29.6:21
Tanana Valley, Alaska, notes on (Green). p. 309 .....	A10.1:901
Tan-bark beetle, destructive, report on (Burgess). 1899. p. 107 ...	A9.6:20
Tannery refuse, utilization of, in France. 1876. p. 280.....	A27.9:14
Tannin, committee on, of Association of Official Agricultural Chem- ists, report of:	
1894. p. 194 .....	A7.3:43
1895. p. 154 .....	A7.3:47
1896. p. 118 .....	A7.3:49
1897. p. 143 .....	A7.3:51
1898. p. 100 .....	A7.3:56
1900. p. 127 .....	A7.3:62
1901. p. 128 .....	A7.3:67
Tannin, determining, by hide power, notes on points of error in shake method of (Yocum). 1894. p. 204.....	A7.3:43
Tanning extracts for analysis, preparation of (Forbes). 1897. p. 149.	A7.3:51
Tanning materials: American (McMurtrie). 1876. p. 459.....	A27.9:876
Mesquite tree as (McMurtrie). 1873. p. 31.....	A27.9:11
Official methods for analysis of (Wiley). 1901 .....	A7.4:8
Tape-worm disease of sheep of Western plains (Curtice). p. 167....	A4.1:887-8
Tapeworms. <i>See</i> Cestodes — Flukes and tapeworms — Poultry.	
Tarantulas, report on. 1894. p. 260.....	A9.7:7
Tariff: Foreign, on agricultural products. 1891. p. 538.....	A27.9:29
Rates on cereals and flour in European countries. 1894. p. 323.	A27.9:32
Reciprocity treaties and, French. 1892. p. 181.....	A27.9:30
South America. 1890. p. 460.....	A27.9:28
Taro, root rot of (Sedgwick). 1902 .....	A12.9:2
Tasajo, or jerked beef, manufacture and exportation of, by River Plata countries. p. 399 .....	A4.1:899
Tasmania, insects of, notes on some injurious and beneficial (Webster). 1889. p. 361 .....	A9.7:1
<i>See also</i> Australasia.	
Tasmanian Coccinellidæ, notes on (Thompson). 1893 p. 11 .....	A9.7:6

## Index

	Classification no.
Taveau, Augustine L. Farming, modern, in America. p. 280.....	A1.1:874
Tax, dog, in England and Scotland. 1867. p. 381.....	A27.9:5
Taxation:	
Highway, comparative results of labor and money systems. 1894.	A22.4:16
same, revised.....	A22.4:24
Local, as affecting farms. 1897 .....	A27.9:35
Taylor, Louise. Kidney worm of swine, our present knowledge of.	
p. 612.....	A4.1:899
<i>See also</i> , as joint author, Stiles, Charles Wardell.	
Taylor, Charles W. Cattle and sheep, raising and feeding more,	
importance of. p. 249 .....	A1.1:864
Taylor, F. W. <i>See</i> , as joint author, Bonsteel, Jay Allan.	
Taylor, H. M.:	
Cattle interests, condition of, west of Mississippi River. p. 306..	A4.1:887-8
Cattle-range industry. p. 105.....	A4.1:886
Range industry, importance of. p. 293.....	A4.1:885
Taylor, Nathaniel R.:	
Atmospheric pressure, high and low. 1897. p. 351.....	A29.6:25
Weather observer. What a weather observer should know.	
1898. p. 543 .....	A29.6:26
Taylor, Thomas:	
Cranberry culture in New Jersey. p. 569.....	A1.1:877
Fibrine and bacteria .....	A18.2:F44
Fungoid diseases of plants. p. 110.....	A1.1:871
Internal parasites in domestic fowls and butter and fats, micro-	
scopic observations.....	A1.8:34
Lard, pure and fictitious, methods of distinguishing between.	
1893 .....	A18.5:3
Microscopic investigation along agricultural lines, monthly, May,	
1872, to Dec., 1876 .....	A27.9:
[The more important articles are indexed under their various subjects.]	
Mushrooms—	
eight edible and twelve poisonous, of U. S., with directions	
for culture and culinary preparation of edible species.	
p. 366 .....	A1.1:890
same, revised .....	A18.5:2
four edible, of U. S. 1893. p. 7.....	A18.5:3
twelve edible, of U. S., with directions for identification and	
preparation as food. p. 100.....	A1.1:885
same, reprinted with an appendix.....	A18.5:1
Napthaline as an insecticide, etc., its effect on seeds, plants, and	
animals. 1883.....	A18.2:N16
<i>See also</i> , for reports as Microscopist, Agriculture Department,	
1872-1894 .....	A18.1:
Taylor, W. Potato disease, cause and cure of. 1869. p. 64.....	A27.9:7
Taylor, William Alton:	
Fruit industry, and substitution of domestic for foreign-grown	
fruits. 1897. p. 305.....	A1.10:897
same, reprinted, with historical and descriptive notes on ten	
varieties of apples suitable for export trade. 1898 .....	A21.3:7
Fruit varieties, little-known, considered worthy of wider dissemi-	
nation. 1901. p. 381.....	A1.10:901
Refrigeration, influence of, on fruit industry. p. 561.....	A1.10:900
Small-fruit culture for market. 1895. p. 283.....	A1.10:895
<i>See also</i> , for reports as Assistant Pomologist, 1893, Acting Pomolo-	
gist, 1900, Pomology Division, Agriculture Department.....	A20.1:
Tea:	
Aboriginal North American. <i>See</i> Ilex cassine.	
Adulteration of (Spencer). 1892. p. 875 .....	A7.3:13 <sup>r</sup>
California, culture. 1870. p. 38 .....	A27.9:8
Consumption of, in United States, per capita of population—	
1870-1895. p. 552 .....	A1.10:895
1896. p. 595 .....	A1.10:896
1898. p. 723 .....	A1.10:898
Cultivation and manipulation. 1873. p. 436.....	A27.9:11



**Tea—Continued**

Culture of—	
experiment in, report on tea gardens of Dr. Charles U. Shepard, Pinehurst, S. C. (Saunders). 1897.....	A14.4:1
experiment in South Carolina (Shepard). 1899 .....	A1.8:61
in United States. p. 235 .....	A1.1:869
probable American industry (Saunders). 1879 .....	A1.6:18
Japan, culture. 1872. p. 286 .....	A27.9:10
Mississippi, cultivation of plant. 1869. p. 301* .....	A27.9:7
Raising, at Pinehurst Experimental Tea Garden, near Summerville, S. C., special report on. p. 627 .....	A1.1:892
See also Chinese tea plant.	
Tea garden, Government, at Summerville, S. C., condition and prospects of (Saunders). p. 28 .....	A1.1:881-2
Teasel, cultivation and use of (Moses). p. 117.....	A1.1:863
Technical education (Hall). 1894. p. 67 .....	A10.3:20
Technical schools, mechanical drawing in (Flather). 1894. p. 81..	A10.3:20
Teele, R. P. Irrigation investigations, 1901, summary of results of. 1902. p. 17 .....	A10.3:119
Tein, M. von. Rhine region, regimen of; high-water phenomena and their prediction. 1894. p. 117.....	A29.3:11 <sup>1</sup>
Teisserenc de Bort, Leon. Atmosphere, studies on, at Trappes, France. 1901. p. 20 .....	A29.6:29
Telegraph:	
Weather service and (Robinson). 1902. p. 145.....	A29.3:31
West India service (Robinson). 1898. p. 410 .....	A29.6:26
See also Seacoast telegraph line—Weather telegraphy—Wireless telegraphy.	
Telephone and kite, note on (Abbe). 1898. p. 366 .....	A29.6:26
Telephone kite (Abbe). 1898. p. 257.....	A29.6:26
Temperature:	
Air, monthly notes on, July, 1891–Oct., 1902 .....	A29.6:
Atmosphere, average (Abbe). 1898. p. 415 .....	A29.6:27
Atmospheric, during month of July, 1895 (Phillips). p. 253.....	A29.6:23
Average, of upper strata, notes on (Abbe). 1901. p. 177 .....	A29.6:29
Baltimore, Md., study of (Walz). 1899. p. 293.....	A29.6:27
Bergen Point, N. J., kite determinations (Allen). 1898. p. 161 ..	A29.6:26
Cape Nome, note on (Abbe). 1900. p. 212.....	A29.6:28
Clothing and, report on (Phillips). 1897. p. 200.....	A29.6:25
Comparison of, with magnetic horizontal force (Bigelow)—	
1894. pp. 415, 460, 504 .....	A29.6:22
1895. p. 7 .....	A29.6:23
Control of scale insects by (Marlatt). 1899. p. 73.....	A9.6:20
Deep lakes, notes on (Abbe). 1901. p. 71 .....	A29.6:29
Diurnal range of, variation of, with latitude and locality (Bigelow). 1902. p. 134 .....	A29.6:30
Duluth, Minn. (Richardson). p. 463.....	A29.6:27
Evaporation and, notes on (Abbe). 1898. p. 213 .....	A29.6:26
Extremes of, safe for perishable goods. 1900. p. 741 .....	A1.10:900
Forest clearing and cultivation, effect upon (Fulton). 1899. p. 89.	A29.3:24
same (Salisbury). 1899. p. 91.....	A29.3:24
Homogeneity and uniformity of, at Weather Bureau stations, notes on (Abbe). 1897. p. 249 .....	A29.6:25
Hourly results from self-registers for recording (Abbe). 1897. p. 252 .....	A29.6:25
Influence of, on process of germination (Detmer). 1895. p. 405.	A29.3:11 <sup>2</sup>
Injurious, protection of food products from (Williams). 1901 ..	A1.9:125
Injurious to food products in storage and during transportation (Williams) .....	A29.3:13
Jamaica (Hall). 1901. p. 503.....	A29.6:29
Low, cause of, for August, 1895 (Abbe). p. 296 .....	A29.6:23
May, and of the year, 1790–1888 (Abbe). p. 216.....	A29.6:22
Mersivan, Turkey (Abbe). 1897. p. 245 .....	A29.6:25
Minimum, abstract of comparison of, recorded at U. S. Weather Bureau and Forest Park meteorological observatories, St. Louis, Mo., 1891 (Hammon and Duenckel). p. 12.....	A29.6:30

\* By a misprint, this page number appears twice.

# Index

	Classification no.
Temperature—Continued	
Montana, sudden changes in, note on (Abbe). 1900. pp. 115, 161.	A29.6:28
Monthly statement of .....	A29.6:
Normal, by decades, for 8 a. m. and 8 p. m., 75th meridian time (Henry). 1902. p. 600 .....	A29.6:29
November and December, 1896 (Hazen). 1897. p. 458 .....	A29.6:24
Probable, forecasts of (Cline). 1899. p. 166 .....	A29.3:24
Reduction of (Morrill). 1897. p. 572 .....	A29.6:25
Relation of, to color, note on (Abbe). 1900. p. 18 .....	A29.6:28
San Juan, Porto Rico, report on (Phillips). 1899. p. 319 .....	A29.1:898
Sensible, or curve of comfort (Abbe)—	
1895. p. 93 .....	A29.6:23
1898. p. 362 .....	A29.6:26
1899. p. 18 .....	A29.6:27
Should reports of rainfall and, be telegraphed from voluntary stations? (Marbury). 1899. p. 108 .....	A29.3:24
Should verifying changes of, be smaller, and should not terms "slightly warmer" or "slightly cooler" be credited? (Cox). 1902. p. 127 .....	A29.3:31
Summer and winter, relations between, notes on (Abbe). p. 557.	A29.6:28
Sunshine, notes on (Abbe). 1899. p. 310 .....	A29.6:27
Thompson, Windham Co., Conn., observations, 1852-94 (Larned). p. 364 .....	A29.6:21
Variations of, of free air at great altitudes (Abbe). 1902. p. 316.	A29.6:30
Vertical gradients of (Frankenfield). 1898 .....	A29.5:F
same (Abbe). 1899. p. 112 .....	A29.6:27
Water in wells, notes on (Kimball). 1901. p. 510 .....	A29.6:29
Wind and, notes on (Abbe). 1901. p. 218 .....	A29.6:29
<i>See also</i> Climatic charts—Climatology—Meteorological observations—Soils—Thermometers—Warm waves.	
Temple, O. P., address of, before Association of American Agricultural Colleges and Experiment Stations, at 2d annual convention. 1889. p. 15 .....	A10.5:1
Ten Broeck, H. H.:	
Aurora, remarkable, at Braidentown, Fla., Nov. 18, 1899. p. 582.	A29.6:27
Auroral-lunar halo display, report of. 1901. p. 551 .....	A29.6:29
Ice on lakes, sudden disappearance of. 1900. p. 286 .....	A29.6:28
Tennessee:	
Agricultural resources of. 1872. p. 201 .....	A27.9:10
Cattle quarantine of counties in—	
Aug. 16, 1897 .....	A4.5:7
Dec. 16, 1897. p. 7 .....	A4.5:8-14
Dec. 20, 1898. p. 3 .....	A4.5:25-29
Dec. 19, 1899. p. 7 .....	A4.5:49-55
Dec. 14, 1900. p. 8 .....	A4.5:80-87
Jan. 11, 1902. p. 9 .....	A4.5:93
Dec. 27, 1902. p. 9 .....	A4.5:101
Cattle trade and allied industries of (Perry). p. 125 .....	A4.1:886
Cotton in. 1866. p. 330 .....	A27.9:4
East, botanical explorations in (Parry). 1870. p. 221 .....	A27.9:8
Farm resources and products of. 1868. p. 122 .....	A27.9:6
Live-stock interests in (Cockrill). 1883. p. 225 .....	A1.7:2
Potato raising in (Callender). p. 657 .....	A1.1:880
River and flood system in, report of (Abbe). 1896. p. 420 .....	A29.6:24
Sheep husbandry in. 1878 .....	A1.2:Sh3
Tornadoes in (Emery). 1900. p. 499 .....	A29.6:28
Wheat culture in. 1875. p. 399 .....	A27.9:13
<i>See also</i> Erwin—Montgomery County.	
Tennessee, University of:	
Dietary studies at, in 1895 (Wait) .....	A10.3:29
same, comments on (Atwater and Woods). p. 33 .....	A10.3:29
Experiments on effect of muscular work upon digestibility of food and metabolism of nitrogen, conducted at, 1897-1899 (Wait). 1901 .....	A10.3:89
Nutrition investigations at, 1896 and 1897 (Wait) .....	A10.3:53
Tent caterpillars, notes on (Weed). 1898. p. 76 .....	A9.6:17
Tenthredinidæ. <i>See</i> Nematinae.	

	Index
	Classification no.
Terne, Bruno:	
Fertilizers, mixed, nitrogen in, availability of. 1893. p. 40....	A7.3:38
Potash, determination of, sources of errors in. 1891. p. 150....	A7.3:31
Terra del Fuego, meteorological station in, notes on (Abbe). 1897. p. 493 .....	A29.6:25
Terrell, J. J. <i>See</i> , as joint author, Page, John R.	
Terrell, Minister. Angora, agriculture in, notice relative to letter from .....	A1.2:An4
Terrestrial magnetic field, cosmical relations manifested in simulta- neous disturbances of, sun, and aurora (Lemström). 1895. p. 492 .....	A29.3:11 <sup>2</sup>
Terrestrial magnetism:	
In 15th, 16th, and 17th centuries, contribution to bibliography of (Hellman). 1895. p. 352 .....	A29.3:11 <sup>2</sup>
Mathematical analysis, as applied to present condition of (Schus- ter). p. 550.....	A29.3:11 <sup>2</sup>
Relations of solar magnetism to, report on (Bigelow). p. 519 ...	A29.1:891 <sup>3</sup>
Terrestrial phenomena, notes on (Abbe). 1900. p. 109.....	A29.6:28
Territories, agricultural capabilities of. p. 601.....	A1.1:869
<i>See also</i> States and Territories.	
Tessier, E. L., jr. Highways, improved. 1902. p. 60 .....	A22.3:23
Testing varieties. <i>See</i> Plants.	
Tetraopes femoratus fab., oviposition in young forest trees by (Gil- lette). 1897. p. 76.....	A9.6:9
Texas:	
Artesian and underground waters in, west of 97th meridian (Hill). pt. 3, p. 41.....	A15.2:Ir7 <sup>2</sup>
Artesian well investigation, field work (Roesler). 1890. p. 243.	A15.2:Ar7
Auroras in, note on (Abbe). 1899. p. 474.....	A29.6:27
Cattle in—	
note on—	
1866. p. 343 .....	A27.9:4
1899. p. 514 .....	A4.1:899
quarantine of, in certain counties—	
July 6, 1897 .....	A4.5:6
Dec. 16, 1897. p. 5 .....	A4.5:8-14
Aug. 17, 1898 .....	A4.5:20
Sept. 30, 1898 .....	A4.5:22
Dec. 20, 1898 .....	A4.5:25-29
Jan. 9, 1899 .....	A4.5:30
June 27, 1899 .....	A4.5:36
Dec. 19, 1899. p. 5 .....	A4.5:49-55
Dec. 14, 1900. p. 5 .....	A4.5:80-87
Jan. 11, 1902. p. 5 .....	A4.5:93
Dec. 27, 1902. p. 5 .....	A4.5:101
raising—	
change in. 1872. p. 202.....	A27.9:10
note on. 1873. p. 271.....	A27.9:11
Cattle trade in, report on. p. 346.....	A1.1:870
Central—	
grasses and forage plants of (Bentley). 1898 .....	A3.3:10
range improvement in, experiments in (Bentley). 1902.....	A19.3:13
Climate of, notes on (Abbe). 1894. p. 331 .....	A29.6:21
Cotton crop of 1887, aggregate damage from cotton worms in (Snow). 1889. p. 32.....	A9.7:2
Cotton in, 1866. p. 329.....	A27.9:4
Farm resources and products of, 1868. p. 115.....	A27.9:6
Fungi of (Ravenel). 1869. p. 169.....	A1.2:C29 <sup>1</sup>
same. p. 171.....	A1.2:C29 <sup>2</sup>
Glanders among horses and mules in (Folsetter). p. 393.....	A4.1:889-90
Horses in, enzootic cerebro-meningitis among (Detmers). p. 363.	A1.1:881-2
Insects, injurious and other, observations on (Webster). 1891. p. 451 .....	A9.7:3
Locusts in, during spring of 1886 (Bruner). 1887. p. 9.....	A9.3:13
Mexican cotton-boll weevil in (Townsend). 1895. p. 295 .....	A9.7:7
Plants from, descriptions of new (Holzinger). 1893. p. 286.....	A6.5:1

# Index

Classification no.

## Texas—Continued

Plants in, certain, of economic value as food for man and stock (Richardson). p. 282.....	A1.1:887
Rainfall in, 1881-93 (Hamrick). p. 174.....	A29.6:22
same, extraordinary (Hazen). 1899. p. 249.....	A29.6:27
Sheep husbandry in (Jenks). 1877. p. 122.....	A.1:2Sh2
same (Watts). 1877. p. 118.....	A.1:2Sh3
Sheep in, diseases of (Detmers). p. 68.....	A1.1:883
Sheep of, scab in. 1867. p. 204.....	A27.9:5
Southern—	
agriculture in. 1889. p. 264.....	A27.9:27
cotton worm in, in spring and early summer of 1883; report upon (Anderson). 1883. p. 31.....	A9.3:3
Southwestern, cattle notes of (Kiernan). p. 511.....	A4.1:899
Storm waves of (Alexander). 1900. p. 381.....	A29.6:28
Storms in, study of (Hazen). 1895. p. 55.....	A29.6:23
Tobacco experiments in. 1893. p. 50.....	A27.9:31
Uplands of, irrigation of rice on (Bond). 1902. p. 11.....	A10.3:113
Verminous diseases of cattle, sheep, and goats in, investigations on (Stiles). p. 356.....	A4.1:900
same (Stiles). p. 223.....	A4.1:901
Western—	
apetalæ of, description of (Coulter). 1894. p. 347.....	A6.5:2
desert region from, to Central Arizona, characteristic vegetation of (Dewey). p. 351.....	A1.1:891
same, p. 351.....	A6.1:891
forage plants of, investigation of (Nealley). 1888. p. 30.....	A6.3:6
gamopetalæ of, description of (Coulter). 1892. p. 153.....	A6.5:2
gramineæ (grass family) of, description of (Dewey). 1894. p. 484.....	A6.5:2
grasses of the desert region of, plates and descriptions of (Vasey). 1890.....	A6.2:N82 <sup>1</sup>
same.....	A6.3:12
monocotyledons of, description of (Coulter). 1894. p. 421.....	A6.5:2
phanerogams and pteridophytes of, manual of 1891-1894. (Coulter).....	A6.5:2
polypetalæ of, description of (Coulter). 1891. p. 6.....	A6.5:2
pteridophyta of, description of (Underwood). 1894. p. 557.....	A6.5:2
Wine land? (Bauer). 1869. p. 451.....	A27.9:6
<i>See also</i> Baird—Brazos River—Colorado Valley—Denison—Fort Worth—Galveston—Rio Grande region—Willis.	
Texas, University of, medical department, synopsis of course of lectures in medical climatology to senior class (Cline). 1902. p. 110.....	A29.3:31
Texas good-roads convention, Houston, Tex., February 19, 1895, proceedings.....	A22.3:15
Texas itch among cattle in Kansas (Mayo). p. 488.....	A4.1:898
Texas or southern cattle fever:	
Additional observations on (Smith and others). 1893. p. 67....	A4.3:3
Australia. p. 85.....	A4.1:895-6
Blood serum as a preventive and cure for, experiments with (Robert). p. 482.....	A4.1:898
same (Schroeder) p. 43.....	A4.1:899
Butler County, Kans., outbreak, 1883. (Trumbower). p. 420 ..	A4.1:884
same. 1884. p. 239.....	A4.2:An5
California cattle (Bowhill). p. 443.....	A4.1:887-8
same, further investigation (Chandler). p. 450.....	A4.1:887-8
Champaign, Ill., investigations (Detmers). 1880. p. 291.....	A1.6:34
Chicago Union Stock Yards (Trumbower). p. 444.....	A4.1:884
Dissemination of, and how to control it. 1882.....	A1.6:50
Fatal outbreak, Deerfield Stock Farm, Kans. (Fullinwider). p. 463.	A4.1:884
Geological distribution of—	
1884. p. 252.....	A1.1:884
same. p. 214.....	A4.1:884
1885. p. 247.....	A1.1:885
same. p. 523.....	A4.1:885

Texas or southern cattle fever—Continued	
Investigations into nature, causation, and prevention of (Smith and Kilborne). p. 177.....	A4.1:891-2
Investigation of—	
1880 (Salmon). p. 98.....	A1.6:22
1880 (Detmers). p. 594.....	A1.1:880
1881 (Salmon). p. 258.....	A1.1:881-2
1883 (Salmon). p. 18.....	A1.1:883
1884 (Detmers). p. 426.....	A4.1:884
same. p. 247.....	A4.2:An5
Kansas outbreak—	
1884 (Trumbower). p. 393.....	A4.1:884
same. p. 207.....	A4.2:An5
1895 (Hill). p. 318.....	A4.1:895-6
Maryland outbreaks (Curtice). p. 429.....	A4.1:887-8
Nature, causation, and prevention of (Smith and Kilborne). 1893.	A4.3:1
Northern cattle—	
inoculation to produce immunity from (Schroeder). p. 273..	A4.1:898
protecting against (Wilcox). 1900. p. 27.....	A1.9:119
Organism in blood of cattle, persistence of (Schroeder). p. 42...	A4.1:899
Ravages of (Phillips). p. 142.....	A1.6:22
Regulations concerning—	
1889. p. 55.....	A1.1:889
same. pp. 13, 67.....	A4.1:889-90
1890. p. 79.....	A1.1:890
Report on—	
1869 (Gamgee). p. 89.....	A1.2:C29 <sup>1</sup>
same. p. 82.....	A1.2:C29 <sup>2</sup>
1884 (Trumbower). p. 452.....	A4.1:884
Reports of inspectors and correspondents. p. 376.....	A4.1:889-90
Scientific investigations. 1890. p. 92.....	A1.1:890
same. p. 80.....	A4.1:889-90
Statistical and historical investigations of progress and results of (Dodge). 1871. p. 175.....	A1.2:C29 <sup>2</sup>
Transmission of, by cattle tick (Mayo). p. 481.....	A4.1:898
Virginia outbreaks (Rose). p. 461.....	A4.1:884
Texel or Mouton flandrin sheep (Chenery). p. 242.....	A1.1:864
Textile fiber production (Willits). p. 46.....	A1.1:889
Textile fibres of Pacific States (Flint). p. 471.....	A1.1:864
Textile material, imports and exports of, by Great Britain, 1863-64.	
No. 5. p. 27.....	A27.9:3
Textile materials, raw, imports and exports of, from Great Britain, 1863-64. No. 5. p. 36.....	A27.9:2
Thalessa, habits of (Riley). 1888. p. 168.....	A9.7:1
Thaxter, Roland. Fungi described in recent reports of Connecticut Experiment Station. 1891. p. 278.....	A28.5:7
Thayer, E. H.:	
Address of, before convention of National League for Good Roads, Washington. 1893. p. 63.....	A10.3:14
Good roads, going in debt for, address on. 1897.....	A22.4:26
Thea viridis. See Chinese tea plant.	
Thelemark cattle of Norway. 1876. p. 432.....	A27.9:14
Theophila mandarina, history of, contribution to (Walker). 1889.	
p. 270.....	A9.7:1
Thermal belt in North Carolina. 1883. No. 58. p. 30.....	A27.9:21
Thermal belts, notes on (Abbe). 1893. p. 365.....	A29.6:21
Thermal or phenologic constants (Ihne). 1895. p. 427.....	A29.3:11 <sup>2</sup>
Thermographs, furnishing of, to voluntary observers, records to be kept at section centers (Wollaber). 1902. p. 219.....	A29.3:31
Thermometer scales, comparison of. 1892.....	A29.2:T34
Thermometers:	
Construction of registering air, to replace ordinary alcohol and mercurial thermometers (Sprung). 1896. p. 718.....	A29.3:11 <sup>3</sup>
Early history of (Abbe). 1897. p. 16.....	A29.6:25
Evolution of, notes on (Abbe). 1900. p. 551.....	A29.6:28
Exposure of, note on (Abbe). 1897. p. 306.....	A29.6:25
Has wind any effect on? (Abbe). 1894. p. 464.....	A29.6:22



# Index

Classification no.

## Thermometers—Continued

Maximum and minimum are too fragile, cannot effective protection be devised without impairing sensitiveness? should not aluminum scales be discarded? (Oberholzer). 1902. p. 217...	A29.3:31
Maximum and minimum—	
directions for use of. 1892 .....	A29.11:B
registering, relative merits of various types (Draper). 1896. p. 710 .....	A29.3:11 <sup>2</sup>
should not temperature forecasts be verified by readings of? (Henry). 1902. p. 134 .....	A29.3:31
Maximum and minimum radiation, instructions for use of (Marvin and Whitney). 1894 .....	A29.11:H
Minimum, index of (Abbe). 1894. p. 511 .....	A29.6:22
Readings of, comparative, at New York (Henry). 1900. p. 99..	A29.6:28
Record of, old, at Pensacola, Fla. (Abbe). 1901. p. 177 .....	A29.6:29
Sluggishness of (Marvin). 1899. p. 458 .....	A29.6:27
Soil, combined maximum and minimum, instructions for use of (Marvin) .....	A29.11:G <sup>1</sup>
Thermometric scale used in meteorology (Abbe). 1895. p. 255....	A29.6:23
Thermoscope, chemical, notes on (Abbe). 1898. p. 552 .....	A29.6:26
Thiesen, Max. Vapor, saturated aqueous, pressure of, at temperatures below freezing. 1899. p. 106 .....	A29.6:29
Thiessen, Alfred H. Snow rollers, report on. 1899. p. 100 .....	A29.6:27
Thistle. See Canadian thistle—Russian thistle.	
Thomas, Cyrus:	
Agriculture of Colorado and New Mexico, notes on. 1869. p. 379* .....	A27.9:7
Colorado, northern, agriculture of, notes on. 1869. p. 284* .....	A27.9:7
Thomas, Fr. Cranberry leaf-galls, report on. 1889. p. 279 .....	A9.7:1
Thomas, John J.:	
Farm implements and machinery. p. 410 .....	A1.1:862
Forest trees, culture and management of. p. 43 .....	A1.1:864
Thomas slag. 1901. p. 6 .....	A1.9:144
Thompson, Alexander. See, as joint author, Wilder, Marshall P.	
Thompson, C. H. See, as collector, Hitchcock, A. S.	
Thompson, E. H. Tasmanian coccinellidæ, notes on. 1893. p. 11..	A9.7:6
Thompson, George Fayette:	
Agriculture Department, documents of, index to authors, with titles of their publications in, 1841-97 .....	A21.3:4
Agriculture Department, index to annual reports of, 1837-93....	A21.3:1
Angora goat. 1901 .....	A1.9:137
Angora goat, information concerning. p. 281 .....	A4.1:900
same, 1901 .....	A4.3:27
Angora goat industry, progress of, in 1901. p. 457 .....	A4.1:901
Animal industry, administrative work of Federal Government in relation to. 1899. p. 441 .....	A1.10:899
same, p. 102 .....	A4.1:899
Animal industry literature in publications of Agriculture Department, index to. 1900 .....	A21.3:5
Animals, contagious diseases of, in foreign countries. p. 492 ....	A4.1:900
Animals and animal products, imports and exports of, 1892-99. p. 421 .....	A4.1:899
same. 1900. p. 535 .....	A4.1:900
Mohair and mohair manufactures. 1901. p. 271 .....	A1.10:901
same. p. 480 .....	A4.1:901
Musk ox. p. 507 .....	A4.1:901
Statistician of Department of Agriculture, synoptical index of reports of, 1863-94. 1897 .....	A21.3:2
Thompson, J. C. Sweet potatoes, culture of, at North, and modes of preserving through winter. p. 220 .....	A1.1:862
Thompson, J. O. West Virginia, farmers' institute work accomplished in. 1902. p. 30 .....	A10.3:120
Thompson, John. Soils, acid digestion of, effects of presence of few drops of nitric acid in. 1895. p. 49 .....	A7.3:47
Thompson, R. O.:	
Botany and agriculture of Rocky Mountain basin. p. 125 .....	A1.1:866

\* By a misprint, this page number appears twice.



# Index

Classification no.

Thompson, R. O.—Continued	
Fruits, native, of Far West. p. 207.....	A1.1:865
Grape-growing at the West. p. 115.....	A1.1:866
Thompson, Wibray J.:	
Brown coal and wood char in filtration of cane juices and sirups. p. 268.....	A1.1:887~
same. p. 99.....	A7.3:17
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Thompson, Windham County, Conn., temperature observations at, 1852-94 (Larned). p. 364.....	A29.6:21
Thomson, A. M. Tree culture on western plains. 1891. p. 45 ....	A13.3:5
Thorne, Charles E.:	
Agricultural experiment stations, officers of, how can we increase the attendance of, at our annual conventions? 1894. p. 61...	A10.3:20
Fertilizers, cooperative field experiments with, report of conference of representatives of experiment stations regarding. 1889.	A10.4:7
Pot or box vs. plat experimentation, report on. 1891. p. 81....	A10.5:3
Thornton, C. C. Swine plague in the Southwest, character of. 1879. p. 84 .....	A1.6:22
Thought. <i>See</i> Climate and thought.	
Thripidae:	
Certain, observations on (Pergande). 1895. p. 390 .....	A9.7:7
Food habits of (Osborn). 1888. p. 137.....	A9.7:1
Thunder:	
Distant, note on (Abbe). 1898, p. 566 .....	A29.6:26
Lightning and, in December (Abbe). p. 464.....	A29.6:23
Lightning without, note on (Abbe). 1900. p. 549 .....	A29.6:28
Thunder cloud, kites within (Hovenden). 1898. p. 250.....	A29.6:26
Thunder storms:	
Air currents in, note on (Abbe). 1899. p. 366.....	A29.6:27
Antigua, W. I. (Alexander). 1900. p. 380 .....	A29.6:28
Apparatus for registering (Abbe). 1902. p. 313.....	A29.6:30
August 2, 1899, report of (Henry). p. 359.....	A29.6:27
Automatic records of (Kimball). 1899. p. 355.....	A29.6:27
Barometric oscillations during, and use of brontometer, with bibliography (Symons). 1901. p. 463.....	A29.6:29
California, notes on (Abbe). 1898. p. 20.....	A29.6:26
Do they advance against the wind? (Abbe). 1895. p. 296 .....	A29.6:23
Eustis, Lake County, Fla. (Abbe). 1897. p. 251.....	A29.6:25
Forecasting, lightning recorders and their utility in (Kenealy). 1902. p. 76 .....	A29.3:31
Franklinville, N. Y. (Kales). 1897. p. 309.....	A29.6:25
Frequency of (Abbe). 1897. p. 251.....	A29.6:25
Idaho, of May 16, 1900, notes on (Abbe). p. 207.....	A29.6:28
Jamaica (Abbe). 1896. p. 15.....	A29.6:24
Movement of, against wind (Abbe). 1895. pp. 383, 423, 465....	A29.6:23
New Brunswick, 1897 (Kain). p. 105.....	A29.6:26
New England, investigation of (Ward). 1893. p. 30 .....	A29.3:9
New explanation of one of its phenomena (McFarland). 1901. p. 297 .....	A29.6:29
New York State, of May 3, 1892 (Turner). 1892. p. 139.....	A29.6:20
Observations, circulars of instruction .....	A29.2:T43
Ohio, during summer of 1892 (Strong). p. 51 .....	A29.3:9
Periods of, effect of proximity to sea on (Stearns). 1898. p. 452.	A29.6:26
Prediction of, notes on (Abbe). 1899. p. 159.....	A29.6:27
Progressive movement of (Henry). 1896. p. 331 .....	A29.6:24
Rain gushes in (Abbe). 1897. p. 303 .....	A29.6:25
same (Abbe). 1898. p. 258 .....	A29.6:26
September 17-18, 1895, report on (Henry). p. 538.....	A29.6:26
Skyland, Page County, Va., August, 1900 (Cragin and Cragin). p. 328 .....	A29.6:28
Summer of 1892, forecasting of (Conger). 1893 .....	A29.3:9
Two, at Royal Alfred Observatory, Mauritius (Claxton). 1900. p. 63 .....	A29.6:28
Washington, D. C., report on (Cragin and Cragin). 1900. p. 287 .....	A29.6:28
Winter, in Mississippi, note on (Abbe). 1900. p. 18.....	A29.6:28

# Index

## Classification no.

Thurston, Robert Henry. Mechanical engineering and mechanic arts, education in. 1896. p. 111 .....	A10.3:41
Tibbey, H. S. Meteorological observations in Alaska. 1894. p. 174.	A29.6:22
Ticks:	
Dipping cattle for destruction of (Nörsgaard). p. 109 .....	A4.1:895-6
South African, notes on some (Lounsbury). 1900. p. 41 .....	A9.6:26
<i>See also</i> Southern cattle ticks.	
Tidal lands:	
Diked marshes and, of Nova Scotia and New Brunswick (Boardman). 1885. p. 33 .....	A1.7:7
Reclamation of, in southwestern New Jersey. 1870. p. 230 .....	A27.9:8
Washington Territory (Morse). 1885. p. 62 .....	A1.7:7
Tide marshes of United States (Nesbit). 1885 .....	A1.7:7
Tides. <i>See</i> Ocean tides.	
Tiger swallow-tail, abnormal, report of (Howard). 1894. p. 44 .....	A9.7:7
Tilden, L. L. Farming, high, as illustrated in history of Netherlands. p. 527 .....	A1.1:866
Tile draining, results of. 1882. No. 43 .....	A27.9:20
Tile-horned prionus in prairie land, note on. 1886. p. 39 .....	A9.3:12
Tillage, relation of, to soil physics (Sanborn). 1891. p. 97 .....	A10.5:3
Tillage and products of soil on irrigated lands (Cureton). 1887. p. 282.	A15.2:P94 <sup>1</sup>
Tillering of grains (Schulte). 1898. p. 10 .....	A1.9:105
Tillman, G. D. Nut grass, extermination of. p. 388 .....	A1.1:889
Same, p. 388 .....	A6.1:889
Tillo, A. A., short biography of (Abbe). 1900. p. 15 .....	A29.6:28
Tillo, Alexis de. Magnetic survey of Europe and Asia. 1895. p. 465.	A29.3:11 <sup>2</sup>
Tilton, G. W. Spark arresters, importance of. 1887. p. 136 .....	A13.3:1
Timber:	
"Boxed" or "turpentine," strength of (Fernow) .....	A13.4:8
Consumption of, letter regarding (Fernow). 1893 .....	A13.2:F76
Culture of, condition of, in Southern and Western States (Baker). 1884. p. 105 .....	A13.5:4
Decay of, and methods of preventing it (Schrenk). 1902 .....	A19.3:14
Elementary discussion of characteristics and properties of wood (Roth). 1895 .....	A13.3:10
same, introduction to (Fernow). 1895. p. 5 .....	A13.3:10
Forests and public domain, legislation for preservation of (Egleston). 1888. p. 212 .....	A13.3:2
Government tests (Fernow) .....	A13.4:7
Increasing durability of (Colman). 1887 .....	A13.4:3
same (Fernow). 1898 .....	A13.4:20
Investigations, collection of test pieces of pines for, instructions for. 1892 .....	A13.2:P65
Nebraska resources (Hall). 1901. p. 207 .....	A1.10:901
Prairies (Edwards). p. 495 .....	A1.1:862
Preservation of. 1866. pp. 142, 382 .....	A27.9:4
Quality, etc., of. 1895. p. 590 .....	A1.10:895
same. 1896. p. 628 .....	A1.10:896
Resources of U. S., relation of railways to (Tratman). 1889. p. 68.	A13.3:3
Ship, in United States (Bates). p. 472 .....	A1.1:866
Turpentine, field report on (Roth). 1893. p. 32 .....	A13.3:8
<i>See also</i> Bridges and trestle timbers—Railroad ties—Wood.	
Timber lands, Government, proper value and management of:	
(Baker). 1884. p. 17 .....	A1.7:5
(Egleston). 1884. p. 11 .....	A1.7:5
(Fernow). 1884. p. 22 .....	A1.7:5
(Hough). 1884. p. 5 .....	A1.7:5
Timber physics:	
Part 1; preliminary report (Fernow). 1892 .....	A13.3:6
Part 2; progress report. 1893 .....	A13.3:8
Progress in (Fernow). 1898 .....	A13.4:18
same (Roth) .....	A13.4:19
Timber pines of southern United States, report on (Mohr) .....	A13.3:13
Same, introduction to report (Fernow). p. 11 .....	A13.3:13
Timber trestle bridges, economical designing of, report on (Johnson).	A13.3:12
Same, review of report (Lindenthal). p. 31 .....	A13.3:12
Same, notes on report (Berg). p. 34 .....	A13.3:12

**Index**  
Classification no.

Time:	
Hawaiian standard of (Abbe). 1900. p. 207.....	A29.6:28
Reckoning, note on (Abbe). 1895. p. 380.....	A29.6:23
Standard, notes on (Abbe)—	
1899. p. 362 .....	A29.6:27
1900. p. 396 .....	A29.6:28
1901. p. 70 .....	A29.6:29
Timothy:	
New enemy to (Howard). 1892. p. 90.....	A9.7:5
Prairie region (Williams). 1896. p. 147 .....	A1.10:896
Smut of (Trelease). p. 87 .....	A1.1:885
Timothy seed. See Crops, principal.	
Tin cans, poisoning by preserving in (Roos). 1892. p. 930.....	A7.3:13 <sup>7</sup>
Tin roofs as lightning conductors, notes on (Abbe). 1898. pp. 166, 258 .....	A29.6:26
Tindall, J. E. South Carolina, farmers' institute work accomplished in. 1902. p. 28.....	A10.3:120
Tineid, interesting, report on (Murtfeldt). 1890. p. 303.....	A9.7:2
Tineina of United States and Canada, Chambers's index of, steps toward revision of. See Walsingham, Lord.	
Tingle, E. W. S. Brunswick, Germany, cost of hauling farm prod- ucts over wagon roads at. p. 7.....	A22.4:27
Tinicum meadow district, on Delaware river. See Kingsessing and Tinicum meadow district.	
Tipton, J. C., address of, before national road conference, July, 1894. p. 20 .....	A22.3:10
Tisserand, E. Ideal department of agriculture and industries. 1896. p. 543.....	A1.10:896
Toad as a friend of the farmer. 1899. p. 28 .....	A1.9:87
Toads as an eradicator of fluke disease (Stiles). p. 220.....	A4.1:901
Tobacco:	
Acreage, report on. 1887. p. 421.....	A27.9:25
American. 1864. No. 6. p. 6.....	A27.9:2
Climate adapted to, notes on (Abbe). 1899. p. 254.....	A29.6:27
Condition of crop, monthly notes on.....	A27.9:
Connecticut River, production on. 1865. No. 2. p. 18.....	A27.9:3
Crop, report on—	
1873. p. 132 .....	A27.9:12
1874. p. 103 .....	A27.9:13
1875. p. 95 .....	A27.9:14
Crop, statistics of, annual.....	A27.1:
Cultivation and curing of, instructions for (Estes).....	A1.9:6
Cultivation of, in Sumatra (Mulder). 1896.....	A1.8:58
Cultural directions for different types distributed. 1902 .....	A19.2:T55
Culture and management of—	
1863 (Bradford). p. 87 .....	A1.1:863
same, with additional matter. No. 1. p. 26 .....	A27.9:2
1867 (Bowie). p. 179 .....	A1.1:867
Culture of—	
brief history of. p. 123 .....	A1.1:862
connection with sheep husbandry. 1878. p. 125 .....	A1.2:Sh3
report on (Butterweck.) 1898.....	A1.9:82
Experiments with, conducted in various parts of United States, results of (Floyd). p. 455 .....	A26.5:900 <sup>1</sup>
Fertilizers for. 1873. p. 39.....	A27.9:11
Industry, growth of (Whitney and Floyd). 1899. p. 429.....	A1.10:899
Insects, principal, affecting plant (Howard) .....	A1.9:120
same. p. 121.....	A1.10:898
Investigations of Agriculture Department (Whitney). 1901. p. 108.....	A10.3:99
Methods of curing (Whitney) .....	A1.9:60
Mosaic disease of (Woods). 1902.....	A19.3:18
Planter's guide for cultivating and curing (Shelton Tobacco-Cur- ing Co.). 1876 .....	A1.8:10
Production and distribution. 1887. p. 445.....	A27.9:25
Report on. p. 565 .....	A1.1:878
Supply of. 1887. p. 380.....	A27.9:25

# Index

	Classification no.
<b>Tobacco—Continued</b>	
Texas, experiments in. 1893. p. 50.....	A27.9:31
Work of agricultural experiment stations on (Schulte). 1900....	A1.8:63
Young, stalk worm, new enemy to (Johnson). 1899. p. 99.....	A9.6:20
See Burley tobacco — Catalase — Cigar-leaf tobacco — Connecticut leaf tobacco — Crops, principal — Leaf tobacco — Sumatra — Sumatra tobacco.	
Tobacco flea-beetle; report on (Chittenden). 1898. p. 79 .....	A9.6:10
Tobacco growers, convention of, at Louisville, Ky., comments on resolutions of. 1865. No. 8. p. 16 .....	A27.9:3
Tobacco horn-worm. See <i>Protoparce carolina</i> .	
<b>Tobacco leaf:</b>	
Tax on, proposed (Newton). 1864. No. 1. p. 17 .....	A27.9:2
Will Congress tax? 1865. No. 2. p. 18.....	A27.9:3
Tobacco powders and extracts, nicotin in, report of investigation of methods for determination of (De Schweinitz and others). 1898. p. 113 .....	A7.3:56
Tobacco seed, plan of distributing, etc. 1902 .....	A19.2:T55
Tobacco soils (Whitney). 1898.....	A1.9:83
Tobacco soils of United States, a preliminary report upon soils of principal tobacco districts (Whitney). 1898.....	A26.3:11
Tobacco-stalk weevil (Chittenden). 1902. p. 66 .....	A9.6:38
Tobacco worm (Glover). 1873. p. 164 .....	A27.9:11
Tobacconists, convention of, recent. 1865. p. 4.....	A27.9:4
Tod, John G., address of, before good roads convention of Texas. Feb., 1895. p. 18.....	A22.3:15
<b>Todd, S. Edwards:</b>	
Farm implements, improved. p. 225 .....	A1.1:866
Underdraining, practical notes on. p. 584.....	A1.1:870
<b>Tollens, B.:</b>	
Ash constituents of plants; their estimation and importance to agricultural chemistry and agriculture. 1902. pp. 207, 305....	A10.6:13
Nitrogen-free extract of plants and feeding stuffs. 1897. p. 641.	A10.6:8
<b>Tolman, L. M.:</b>	
Coloring matter for foods, analysis of, provisional method for. 1902. p. 111.....	A7.3:65
Edible oils and fats, not including dairy products, methods for chemical analysis of. 1901 .....	A7.2:Oi5
same. p. 20.....	A7.3:65
See also, as collaborator, Bigelow, Willard Dell; as joint author, Munson, L. S.	
<b>Tomatoes:</b>	
Bacterial disease of (Smith). 1896.....	A28.3:12
Blight and rot of, treatment of. 1887.....	A28.4:4
Boll worm injuring, experiments on (Tracy). p. 141.....	A1.1:888
same. p. 141.....	A9.1:888
Fresh and canned (Langworthy). 1900. p. 21.....	A1.9:119
Fungus diseases of, treatment of (Howell). 1889. p. 49 .....	A6.3:11
Growing (Voorhees). 1898.....	A1.9:76
Packing, 1885-86. p. 556.....	A27.9:24
<b>Tongue, Thomas H.</b> Good roads, beneficial influences of. 1902. p. 56 .....	A22.3:25
Tongues of woodpeckers (Lucas). 1895. p. 35.....	A5.3:7
Topography of southern Appalachians (Keith). p. 113.....	A1.2:Ap4 <sup>2</sup>
Topography. See Agricultural topography.	
Tornado cloud of March 4, 1894 (Neal). p. 127.....	A29.6:22
Tornado fake, newspaper, notes on (Abbe): 1899. p. 360.....	A29.6:27
<b>Tornadoes:</b>	
Alarms, unnecessary, notes on (Abbe). 1899. p. 255 .....	A29.6:27
Albany, N. Y., March 26, 1895, report of (Sims). p. 92 .....	A29.6:23
April and May, 1896 (Henry). p. 82 .....	A29.6:24
Augusta, Ga., March 20, 1895., report of (Fisher). p. 92 .....	A29.6:23
Characteristics of, notes on (Abbe). 1899. p. 157.....	A29.6:27
Cherry Hill, N. J., and Wood Haven, Long Island, N. Y., report of (Emery). 1895. p. 252.....	A29.6:23
Cook County, Ill., May 25, 1896 (Abbe). p. 168.....	A29.6:24
Eaglesmere, Pa., June 27, 1892., report of (Ball). p. 309.....	A29.6:20

**Tornadoes—Continued**

Force of (Groat). 1899. p. 305.....	A29.6:27
Fort Smith, Ark., of Jan. 12, 1898 (O'Donnell). p. 18.....	A29.6:26
Frequency per unit area (Abbe). 1897. p. 250.....	A29.6:25
Galveston, Tex., Nov. 6, 1892 (Wright). p. 309.....	A29.6:20
Hampton Beach, N. H., July 4, 1898 (Sweetland). p. 308.....	A29.6:26
Hudson Co., N. J., on Aug. 24, 1901 (Eadie). p. 355.....	A29.6:29
Iowa and neighboring States, May 3, 1895 (Abbe). p. 173.....	A29.6:23
Michigan, May 25, 1896, report on (Conger). p. 156.....	A29.6:24
Mississippi (Emery). 1902. p. 265.....	A29.6:30
New Richmond, Wis. (Libby). 1899. p. 299.....	A29.6:27
No increase in, notes on (Abbe). 1899. p. 158.....	A29.6:27
Norfolk, Va., on Aug. 6, 1901 (Gray). p. 372.....	A29.6:29
Observations of, report of (Gale). 1899. p. 303.....	A29.6:27
Origin of, notes on (Abbe). 1898. p. 552.....	A29.6:26
Phenomena, notes on (Abbe). 1899. p. 311.....	A29.6:27
Photographs of, spurious, notes on (Abbe). 1899. p. 313.....	A29.6:27
same (Henry). 1899. p. 203.....	A29.6:27
Prediction of, notes on (Abbe). 1899. p. 159.....	A29.6:27
Report of, 1889-1896 (Henry). 1896. p. xxiii.....	A29.1:896
Report on (Watts). 1899. p. 307.....	A29.6:27
St. Louis, low pressure in (Baier). 1896. p. 332.....	A29.6:24
St. Louis, May 27, 1896 (Abbe). 1896. p. 255.....	A29.6:24
same (Frankenfield). p. 77.....	A29.6:24
St. Louis, origin of (Walsh). 1897. p. 308.....	A29.6:25
Tennessee, Mississippi, and Arkansas (Emery). 1900. p. 499...	A29.6:28
Tracks, ancient, note on (Abbe). 1899. p. 366.....	A29.6:27
Waterspout, cloud-burst or, note on (Abbe). 1897. p. 207.....	A29.6:25
Wind force in, notes on (Kimball). 1901. p. 419.....	A29.6:29
<i>See also</i> Baguios — Cyclones.	
<b>Toronto, Canada:</b>	
Cloud heights at (Abbe). 1897. p. 303.....	A29.6:25
Cloud observations at (Blake). 1897. p. 19.....	A29.6:25
<b>Tortoise. <i>See</i> Florida land tortoise.</b>	
<b>Tortricid, new, from California, description of (Walsingham). 1891.</b>	
p. 465.....	A9.7:3
<b>Totten and Crossfield purchase. <i>See</i> Hosmer, Ralph S., and Bruce, Eugene S.</b>	
Toumey, J. W. Tree planting, practical, in operation. 1900.....	A13.3:27
Tourgée, Albion W. Oleomargarine in France. p. 513.....	A4.1:900
Towns County, Ga., cattle in, order releasing from quarantine. 1898.	A4.5:21
Same, Aug. 1, 1899.....	A4.5:41
<b>Townsend, C. H. Tyler:</b>	
Biologic notes on New Mexico insects. 1892. p. 37.....	A9.7:5
Chilo saccharalis in New Mexico. 1891. p. 24.....	A9.7:4
Cottontail bot, further notes on, with breeding and identification of fly. 1893. p. 317.....	A9.7:5
Dipterous parasites in their relation to economic entomology. 1893. p. 201.....	A9.7:6
Entomological notes of interest. 1891. p. 26.....	A9.7:4
Insect injury in New Mexico, possible and actual influence of irrigation on. 1892. p. 78.....	A9.7:5
Locusts, injurious and other, of New Mexico and Arizona. 1893. p. 29.....	A9.7:6
Mexican cotton-boll weevil in Texas, report on. 1895. p. 295...	A9.7:7
Mexico, insects of economic importance in, report of trip to investigate. 1896. p. 9.....	A9.8:4
Michigan, injurious insects in, some notes recorded on. 1889. p. 42.....	A9.7:2
White grub of Allorhina, note on. 1891. p. 25.....	A9.7:4
<i>See also</i> , as collector, Cockerell, Theodore Dru Alison.	
Townsend, C. O. Sugar beet, some diseases of. 1902. p. 90.....	A1.8:72
Townsend, Theodore F. Weather map, is it appreciated and understood by the masses? would not postal card weather forecast prove satisfactory substitute for map? 1899. p. 102.....	A29.3:24
Toxoptera, grain, notes on (Webster). 1892. p. 245.....	A9.7:4
<b>Tracheal injections. <i>See</i> Bronchitis, verminous.</b>	



# Index

	Classification no.
Traction tests on public roads (Neely). 1896 .....	A22.3:20
Tracy, Samuel Mills:	
Cooperative branch grass stations in South. p. 344 .....	A1.1:891
same. p. 344 .....	A6.1:891
Corn culture in South. 1898 .....	A1.9:81
Cotton, cultivated varieties of. 1896. p. 197 .....	A10.3:33
Dairying in South. 1902 .....	A1.9:151
Forage plants and forage resources of Gulf States. 1898 .....	A3.3:15
Forage plants for the South .....	A1.9:18
Forage plants of secondary or undetermined importance for South-	
ern States, and composition of forage plants grown in South.	
1896. p. 91 .....	A10.6:6
Grape growing in South. 1900 .....	A1.9:118
Grasses of arid regions of New Mexico, Arizona, Nevada, and	
Utah, investigation of. 1888. p. 5 .....	A6.3:6
Hog raising in the South. 1899 .....	A1.9:100
same. p. 362 .....	A4.1:899
Mississippi Experiment Station. p. 378 .....	A1.1:890
same. p. 378 .....	A6.1:890
Puccinia and uromyces, new species of, descriptions of. 1891.	
p. 281 .....	A28.5:7
Tomatoes, boll worm injuring, experiments on. p. 141 .....	A1.1:888
same. p. 141 .....	A9.1:888
<i>See also</i> , as joint author, Ellis, J. B.	
Tracy, W. W., jr.:	
Peppers, American varieties of. 1902 .....	A19.3:6
Vegetables, commercial varieties, testing of. 1900. p. 543 .....	A1.10:900
Trade:	
Domestic and foreign industry and, notes of. 1892. p. 360 .....	A27.9:30
Export, of U. S., in live stock and meat products, 1889-1892 (Rusk).	A1.2:R89
Falling off of, between Great Britain and U. S. 1865. No. 5. p. 32.	A27.9:3
Foreign—	
agricultural products—	
.1892. p. 308 .....	A27.9:30
1893-1897. (Hitchcock) .....	A12.3:10
1894-1898. (Hitchcock) .....	A12.3:15
1890-1899. (Hitchcock) .....	A12.3:19
1891-1900. (Hitchcock) .....	A12.3:23
1892-1901. (Hitchcock) .....	A12.3:27
American surplus and. 1889. p. 159 .....	A27.9:27
recent features of (Peters) .....	A27.8:8
Japan, China, and Hongkong, 1889-1899, our trade with (Hitch-	
cock). 1900 .....	A12.3:18
Pan-American. 1890. p. 454 .....	A27.9:28
Scandinavia, our trade with, 1890-1900 (Hitchcock). 1900 .....	A12.3:22
Tradescantia, three new species of, from U. S. (Rose). 1899. p. 204.	A6.5:5
Traffic of country roads, circular relative to. 1896 .....	A22.4:19
Trans-Mississippi and International Exposition. <i>See</i> Omaha.	
Trans-Missouri irrigating convention, 1873. p. 598 .....	A27.9:11
Transportation:	
Development of, in United States (Sinclair). 1899. p. 643 .....	A1.10:899
Farm. 1901. p. 690 .....	A1.10:901
Notes on, question. 1866. p. 70 .....	A27.9:4
Transportation companies:	
Freight rates of, monthly notes on, Aug., 1882-Dec., 1895 .....	A27.9:
Letter to, relative to exportation of diseased cattle. 1890 .....	A1.2:R13 <sup>1</sup>
Warnings of washouts, floods, cold waves, and heavy snowfalls	
for benefit of (Outram). 1899. p. 38 .....	A29.3:24
same (Smith). 1899. p. 37 .....	A29.3:24
Transportation rates:	
European. 1883. No. 56, p. 39 .....	A27.9:21
Farm products, cost of hauling to market or to shipping points in	
foreign countries, reports of consuls. 1897 .....	A22.4:27
Garden truck, and growth of industry (Ward and Holmes). 1901.	A27.8:21
Report on—	
1897. p. 755 .....	A1.10:897
1898. p. 723 .....	A1.10:898



Transportation rates—Continued	
Report on—Continued	
1899. p. 841 .....	A1.10:899
1900. p. 836 .....	A1.10:900
1901. p. 788 .....	A1.10:901
Road materials and, in certain States west of Mississippi River, information regarding. 1894 .....	A22.3:5
<i>See also</i> Freight rates.	
Trap for insects. <i>See</i> Lantern trap for insects.	
Traphagen, F. W. Alkali in Montana. 1900. p. 72 .....	A10.3:76
Trappes, France:	
Atmosphere at, studies on (Teisserenc de Bort). 1901. p. 20...	A29.6:29
Balloons and kites at, results of work with (Abbe). 1899. p. 411.	A29.6:27
Trapping of sparrows for sporting purposes, with paper descriptive of apparatus and methods employed (Hill). 1889. p. 178....	A5.3:1
Tratman, Edward Ernest Russell:	
Metal track on railways as substitute for wooden ties, preliminary report on. 1889. p. 7.....	A13.3:3
same, report on. 1890. p. 53.....	A13.3:4
Patents relating to metal railway track—	
1889. p. 36 .....	A13.3:3
1890. p. 326 .....	A13.3:4
1894. p. 292 .....	A13.3:9
Railways, relation of, to timber resources of U. S. 1889. p. 68..	A13.3:3
Railway ties in England, treatment of. 1889. p. 49.....	A13.3:3
Use of metal railroad ties. 1894.....	A13.3:9
Treasury, Comptroller of, decision relative to use of annual appropriations, Apr. 18, 1900 .....	A2.2:Ap6
Treasury Department, files in, injury done by roaches to. 1888. p. 67.	A9.7:1
Treaty. <i>See</i> Reciprocity treaty.	
Tree crickets, carnivorous habits of (Murtfeldt). 1889. p. 130.....	A9.7:2
Tree hopper. <i>See</i> Buffalo tree hopper — Membracidæ.	
Tree planters, practical assistance to (Pinchot).....	A13.4:22
Tree seeds, collection of, and propagation of seedlings (Sudworth). 1900 .....	A13.3:29
<i>See also</i> Forest nursery.	
Trees:	
Age of, and time of blazing determined by annual rings. 1897...	A13.4:16
American, regulations of foreign governments regarding importation of (Howard). 1900.....	A9.5:41
Banding of, to prevent injury by fall cankerworm, observations on (Britton). 1901. p. 160.....	A10.3:99
Big, of California .....	A13.2:B48
same, 1900.....	A13.3:28
Budding of, dates of. 1864. No. 2. pp. 67, 82 .....	A27.9:2
Climate of Colorado and its effect on (Parsons). 1888. p. 221..	A13.3:2
Culture on western plains (Thomson). 1891. p. 45 .....	A13.3:5
Distribution of shrubs and, in deserts and desert ranges of southern California, southern Nevada, northwestern Arizona, and southwestern Utah, notes on (Merriam). 1893. p. 285.....	A5.5:7
Forecasters of rain (Abbe). 1902. p. 315 .....	A29.6:30
Growth of—	
maximum size and age, period of decline, completion of cycle, etc. (Furnas). 1884. p. 338 .....	A13.5:4
rate of. 1898. p. 664 .....	A1.10:898
Important in forestry. 1897. p. 645.....	A1.10:897
Inspection of, as conducted under laws of California (Lelong). p. 12.	A1.8:57
Nursery inspection in Connecticut (Britton). 1899. p. 131 .....	A10.3:65
Of San Diego County, Cal. 1888. p. 202 .....	A13.3:2
Of Washington, D. C. 1891 .....	A13.2:T71
Planting—	
Dakota plains, experience in. 1891. p. 45.....	A13.3:5
experimental, in plains (Keffer). 1898 .....	A13.3:18
for profit in Middle States. 1872. p. 293 .....	A27.9:10
patriotic duty (Rothrock). 1895. p. 32 .....	A1.8:56
practical, in operation (Toumey). 1900.....	A13.3:27
rural school grounds (Hall). 1901.....	A1.9:134

# Index

Classification no.

## Trees—Continued

### Planting—Continued

- waste places on farm (Keffer). 1896. p. 323 ..... A1.10:896
- western plains (Keffer). 1895. p. 341 ..... A1.10:895
- Planting and growing on the plains (Furnas). 1883. p. 202.... A1.7:2
- same. p. 37..... A1.8:28
- Prairies, note on. 1866. p. 286 ..... A27.9:4
- Pruning of other plants and (Saunders). 1898. p. 151 ..... A1.10:898
- Seedlings, instructions for growing ..... A13.4:6
- Some foreign, of economic value adapted to planting in Southern States. 1895 ..... A13.3:11
- Southern Appalachians (Ashe and Ayres). p. 93..... A1.2:Ap4<sup>2</sup>
- Standing measurement of. 1898. p. 662..... A1.10:898
- Transplanted, application of water pressure to. 1899. p. 21 .... A1.9:87
- Which trees attract lightning? (Abbe). 1898. p. 257..... A29.6:26

*See also* Almond—Apple—Arbor day—Arborescent flora—Bamboo—Beech—Birch—Boxed or turpentine timber—Camphor—Carya alba—Catalpa—Cherry—Chestnut—Cinchona—Citrus trees—Cocoa palm—Cocoanut palms—Conifers—Cork oak—Cork tree—Cottonwood—Cuban pine—Date palm—Eucalyptus—Evergreen—Forest trees—Fruit trees—Hard woods—Lebbek—Loblolly pine—Longleaf pine—Maple—Marsh or Pond pine—Mesquite—Oaks—Orchard trees—Osage orange—Peach trees—Pear trees—Pine—Plum trees—Red cedar—Sapindaceæ—Shade trees—Shortleaf pine—Southern pine—Spruce pine—Timber—Timber pine—Wattle tree—Western hemlock—White pine—Willow—Witch-hazel—Woody plants—Zamia.

## Trelease, William:

- Aletia, habits and natural history of. 1878. p. 361..... A9.2:C82
- Nectar, what it is, and some of its uses. 1879. p. 319 ..... A9.2:C82
- Orchard grass, spot disease of. p. 129..... A1.1:886
- same, p. 129 ..... A28.1:886
- Smut of timothy. p. 87..... A1.1:885

Treleasea, a new genus of Commelinaceæ (Rose). 1899. p. 207..... A6.5:5

Trematode *H. similis* looss. *See* *Hæmatolœechus*.

Trematodes. *See* Fluke-worms.

Tremex, habits of (Riley). 1888. p. 168..... A9.7:1

Trenchard, John A. Southern agriculture, condition and prospects of. 1868. p. 447..... A27.9:6

Trenton, N. J., insecticide experiments at (Bennett). 1886. p. 27.. A9.3:11

## Tres Marias Islands, Mexico:

- Bibliography of, partial (Nelson). 1899. p. 93..... A5.5:14
- Birds of (Nelson). 1899. p. 21 ..... A5.5:14
- Crustacea of, notes on (Rathbun). 1899. p. 73 ..... A5.5:14
- Description of (Nelson). p. 7 ..... A5.5:14
- Mammals of (Nelson). 1899. p. 15..... A5.5:14
- Natural history of. 1899..... A5.5:14
- Plants of (Rose). 1899. p. 77 ..... A5.5:14
- Reptiles of (Stejneger). p. 63..... A5.5:14

Trescot, T. C. *See*, as collaborator, Wiley, Harvey Washington.

## Trestle bridges, timber, economical designing of:

- Report on (Johnson)..... A13.3:12
- same, notes on report (Berg). p. 34 ..... A13.3:12
- same, review of report (Lindenthal). p. 31 ..... A13.3:12
- See also* Bridges and trestle timbers—Timber.

Triblidium rufulum, report on (Ellis). 1889. p. 29 ..... A28.5:5

Trichina spiralis, report on. p. 389..... A1.1:869

## Trichinæ:

- American (Virchow). 1884. p. 181..... A4.3:30
- German inspection of American hog products (Barnes). p. 516.. A4.1:898
- See also* Pork.

## Trichinosis:

- Europe, of alleged American origin (Stiles). 1901. p. 156..... A4.3:30
- Extent of, in America and Europe (Salmon). p. 475..... A4.1:884
- same. 1884. p. 269 ..... A4.2:An5

**Index**  
Classification no.

<b>Trichinosis—Continued</b>	
Germany—	
bibliography of (Hassall). 1901. p. 193.....	A4.3:30
general remarks on (Stiles). 1901. p. 9.....	A4.3:30
statistical review, during 1881-1898 (Stiles). 1901. p. 35.....	A4.3:30
Note on. 1866. pp. 56, 127.....	A27.9:4
Trinidad, British West Indies, insect pests of, notes on some (Urich). 1893. p. 196.....	A9.7:6
Tropical cyclones, atmospheric circulation in, as shown by movements of clouds (Boyer). 1896.....	A29.2:At6 <sup>1</sup>
Tropical islands of U. S., agriculture in (Cook). 1901. p. 349.....	A1.10:901
Tropical vegetable, chayote (Cook). 1901.....	A6.3:28
Trotters. See Roadsters and trotters.	
Troughs, barometric, of Plateau region, report on (Hazen). 1895. p. 207.....	A29.6:23
Trowbridge, John:	
Electrodynamic radiations from sun, endeavor to discover. 1896. p. 409.....	A29.6:24
Lightning, does it ever strike ocean? 1902. p. 478.....	A29.6:30
Roentgen rays, report on. 1897. p. 348.....	A29.6:25
Truck farming:	
Development of (Earle). 1900. p. 437.....	A1.10:900
Louisiana (Wiggins). 1887. p. 240.....	A27.9:25
Report on (Oemler). p. 583.....	A1.1:885
same (Reeve). p. 663.....	A1.1:888
True, Alfred Charles:	
Advertising in our agricultural experiment station publications. 1898. p. 41.....	A10.3:49
Agricultural colleges, American, some types of. 1898. p. 63....	A1.10:898
Agricultural colleges and experiment stations, American, report of bibliographer of. 1901. p. 29.....	A10.3:99
Agriculture Department, relation of, to farmers' institutes. 1902. p. 22.....	A10.3:110
Agricultural education in United States. 1899. p. 157.....	A1.10:899
Agricultural education and research in Belgium. 1896. p. 361..	A1.10:896
Agricultural experiment station movement in United States—	
brief account of. 1889. p. 73.....	A10.3:1
history and organization of.....	A10.4:44
permanent elements in work of. 1896.....	A10.4:30
report on. 1899. p. 513.....	A1.10:899
their objects and work. 1895.....	A10.3:26
work and expenditures of.....	A10.1 <sup>2</sup> :
work of, some elements of permanency in. 1896. p. 42.....	A10.3:30
Bibliographer of Association of American Agricultural Colleges and Experiment Stations, report of—	
1897. p. 20.....	A10.3:49
1899. p. 19.....	A10.3:76
1901. p. 16.....	A10.3:115
Card index of experiment station literature, outline of. 1902....	A10.4:47
See also, Agricultural literature, index to.	
Education and research in agriculture in United States. 1894. p. 81.....	
Education, popular, for the farmer in United States. 1897. p. 279..	A1.10:894
Europe, institutions for agricultural education in, some features of. 1897. p. 7.....	A1.10:897
A10.4:32	
Experiment Stations Office, Agriculture Department—	
work of. 1895. p. 39.....	A10.3:24
work of, for farmer. 1897. p. 135.....	A1.10:897
Farmers' institute as medium for developing mutual interests and relations of farmers and United States Department of Agriculture. 1902. p. 102.....	A10.3:120
Farmers' institute work in Alaska, Hawaii, and Porto Rico. 1902. p. 33.....	A10.3:120
Rural common school, some problems of. 1901. p. 133.....	A1.10:901
See also, for reports as Director, Experiment Stations Office, Agriculture Department, 1893-1902.....	A10.1:

# Index

Classification no.

## True, Alfred Charles—Continued

*See also*, as editor of proceedings, Agricultural Colleges and Experiment Stations, American, Association of; Farmers' Institute Workers, American Association of—Hogan, Mrs. Louis E. Shimer.

- |   |                       |
|---|-----------------------|
| True, Alfred Charles, and Clark, V. A. Agricultural experiment stations in U. S. 1900 .....                                 | A10.3:80              |
| True, Alfred Charles, and Crosby, D. J. Agriculture experiment stations in foreign countries. 1902 .....                    | A10.3:112             |
| True, Alfred Charles, and Hall, Frank H. Farmers' institutes, report on. 1897. p. 635 .....                                 | A10.6:7               |
| True, Alfred Charles, and Milner, R. D. Nutrition investigations of Agriculture Department, development of. 1899. p. 403... | A1.10:899             |
| Trumbower, M. R.:   |                       |
| Bronchitis, parasitic, among calves. p. 465 .....   | A4.1:884              |
| Cattle—   |                       |
| ear of, diseases of. p. 367 .....   | A4.2:C29 <sup>2</sup> |
| eye of, and its appendages, diseases of. p. 353 .....   | A4.2:C29 <sup>2</sup> |
| foot of, diseases of. p. 349 .....  | A4.2:C29 <sup>2</sup> |
| skin of, diseases of. p. 325 .....  | A4.2:C29 <sup>2</sup> |
| Ergotism among cattle in Kansas. p. 310 .....   | A4.1:884              |
| same. p. 89 .....   | A4.2:An5              |
| Glanders, outbreak of, at Miami, Mo. p. 457 .....   | A4.1:884              |
| Glanders among horses. p. 418 .....   | A4.1:884              |
| same. p. 237 .....  | A4.2:An5              |
| Hog cholera, or swine plague. p. 419 .....  | A4.1:884              |
| same. p. 238 .....  | A4.2:An5              |
| Horse—  |                       |
| heart and blood vessels of, diseases of. p. 219 .....   | A4.2:H78              |
| nervous system of, diseases of. p. 181 .....  | A4.2:H78              |
| Kansas, Southern cattle fever in, outbreak of. p. 393 .....   | A4.1:884              |
| same. p. 207 .....  | A4.2:An5              |
| Southern cattle fever at Chicago Union Stock Yards. p. 444 .....  | A4.1:884              |
| Southern cattle fever, outbreak of, in Butler County, Kans. 1883. p. 420 .....  | A4.1:884              |
| same. p. 239 .....  | A4.2:An5              |
| Texas fever, tuberculosis, glanders. p. 452 .....   | A4.1:884              |
| Trypanosomiasis in rats and bandicoots. p. 155 .....  | A4.1:901              |
| <i>See also</i> Surra.  |                       |
| Tsetse-fly disease. <i>See</i> Nagana.  |                       |
| Tuberculin:   |                       |
| Distribution of. 1899. p. 532 .....   | A4.1:899              |
| Growing tubercle bacilli for (Cary). 1898. p. 8 .....   | A4.3:22               |
| Injections of, effects upon milk of healthy and diseased cows (De Schweinitz). 1896. p. 15 .....                            | A4.3:13               |
| Made from tuberculosis bacilli derived from different animals, effect of (De Schweinitz and Schroeder). p. 579 .....        | A4.1:901              |
| Preparation and use of (De Schweinitz). 1898. p. 111 .....  | A1.10:898             |
| Test for tuberculosis (Salmon). 1901. p. 581 .....  | A1.10:901             |
| Test of imported cattle (Salmon). 1901 .....  | A4.3:32               |
| Uses of (De Schweinitz). 1894. p. 159 .....   | A4.3:7                |
| Tuberculosis:   |                       |
| Among domestic animals, preventive measures against (Bang). p. 535 .....  | A4.1:899              |
| Animal, in some of its relations to human tuberculosis (Salmon). p. 257 .....   | A4.1:901              |
| Bovine, practical suggestions for suppression and prevention of (Smith). 1894. p. 317 .....                                 | A1.10:894             |
| Cattle—   |                       |
| detection of (Curtice). p. 283 .....  | A4.1:895-6            |
| in Kansas (Mayo). 1899. p. 479 .....  | A4.1:898              |
| in Saxony. p. 99 .....  | A4.1:893-4            |
| prevalence of, in New York (Schroeder). p. 66 .....   | A4.1:893-4            |
| Cattle and other animals, necessity of reducing. 1898. p. 22 .....  | A1.9:69               |
| Germes of, in milk, killing (Wilcox). 1899. p. 24 .....   | A1.9:107              |
| Investigations of. 1896 .....   | A4.3:13               |
| same (De Schweinitz). p. 289 .....  | A4.1:898              |

	<b>Index</b>
	<b>Classification no.</b>
<b>Tuberculosis—Continued</b>	
New South Wales (Baker). p. 386 .....	A4.1:898
same, correction, p. 502 .....	A4.1:899
Olive (Pierce). 1891. p. 148 .....	A28.5:6
Report on (Trumbower). p. 452 .....	A4.1:884
Suppression and prevention of, some practical suggestions for (Smith). 1894. p. 129 .....	A4.3:7
Swine; nature of disease, with report of three cases (Moore and Dawson). p. 207 .....	A4.1:895-6
Tuberculin test for (Salmon). 1901. p. 581 .....	A1.10:901
<i>See also</i> Berlin, international congress on tuberculosis—Bovine tuberculosis—Cattle orders.	
<b>Tuberculosis bacillus:</b>	
Attenuated—	
further experiments with (De Schweinitz and Schroeder). 1896. p. 11 .....	A4.3:13
its use in producing immunity from tuberculosis in guinea pigs (De Schweinitz). p. 318 .....	A4.1:898
Branched forms of, found in cultures (Dorset). p. 572 .....	A4.1:901
Composition of (De Schweinitz and Dorset). p. 295 .....	A4.1:898
Cultivation of, use of eggs as medium for (Dorset). p. 574 .....	A4.1:901
Derived from different animals, effect of tuberculins made from (De Schweinitz and Schroeder). p. 579 .....	A4.1:901
Experimental observations on presence of, in milk of cows (Schroeder). 1894. p. 75 .....	A4.3:7
Fats contained in (De Schweinitz and Dorset). p. 301 .....	A4.1:898
Growing, for tuberculin (Cary). 1898. p. 8 .....	A4.3:22
Growth of, upon acid media (De Schweinitz and Dorset). 1896. p. 7 .....	A4.3:13
Mineral constituents of (De Schweinitz and Dorset). p. 302 .....	A4.1:898
New stain for (Dorset). p. 326 .....	A4.1:898
Report on (De Schweinitz). p. 262 .....	A4.1:900
Some experimental observations on presence of, in milk of tuberculous cows when udder is not visibly diseased (Smith and Schroeder). 1893. p. 60 .....	A4.3:3
Some products of, and treatment of experimental tuberculosis with antitoxic serum (De Schweinitz). p. 305 .....	A4.1:898
<b>Tubers. <i>See</i> Plants.</b>	
Tule River Basin, California, duty of water in (Chandler). 1902. p. 159 .....	A10.3:119
Tulip tree leaf gall-fly, report on. 1890. p. 362 .....	A9.7:2
Tumbling mustard. <i>See</i> Mustard.	
Tumors of cattle (Lowe). p. 321 .....	A4.2:C29 <sup>2</sup>
Tunnell, Ebe W. Delaware, road improvement in, extract from governor's message. p. 3 .....	A22.4:33
<b>Tupper, Mrs. Ellen S.:</b>	
Bee keeping. p. 458 .....	A1.1:865
Winter bee keeping. p. 209 .....	A1.1:867
<b>Turkestan alfalfa (Kennedy). 1900 .....</b>	<b>A3.4:25</b>
<i>See also</i> Alfalfa.	
Turkey, sheep farming in. 1868. p. 365 .....	A27.9:6
<i>See also</i> Angora—Mersivan.	
Turkey in Asia. <i>See</i> Harpoot.	
<b>Turkeys:</b>	
Animal parasites of, check list of (Hassall). 1896 .....	A4.4:12
Domestic, origin of (Baird). p. 288 .....	A1.1:866
Entero-hepatitis in, infectious, direct transmission of (Moore). 1895 .....	A4.4:5
Infectious disease (entero-hepatitis) among, caused by protozoa (Smith). 1895. p. 7 .....	A4.3:8
Unknown diseases in, preliminary investigations of (Smith). p. 82 .....	A4.1:893-4
<b>Turks Island, Weather Bureau station on, note on (Abbe). 1900. p. 293 .....</b>	<b>A29.6:28</b>
<b>Turner, E. M. College work section, Association of American Agricultural Colleges and Experiment Stations, report of. 1893. p. 24 .....</b>	<b>A10.3:16</b>

# Index

## Classification no.

Turner, E. T. Thunderstorms of May 3, 1892, in New York State. 1892. p. 139 .....	A29.6:20
Turnip beetle. <i>See</i> Red turnip beetle.	
Turpentine gathering, effect of, on timber of longleaf pine (Fernow).	A13.4:9
Turpentine timber. <i>See</i> Boxed or turpentine timber.	
Turtle Mountains, North Dakota, investigation to determine whether <i>Melanoplus spretus</i> breeds permanently in (Hunter). 1900. p. 30 .....	A9.6:22
Tuskegee Normal and Industrial Institute. <i>See</i> Atwater, Wilbur Olin, and Woods, Chas. D.	
Tuspan, Mexico, agriculture of (Johnson). 1874. p. 498 .....	A27.9:12
Tussock moth, white marked, consideration of parasites of, etc. (Howard). 1897 .....	A9.8:5
Twig girdler, notes and observations on (Scheffer). 1895. p. 345 ..	A9.7:7
Twig pruners and allied species (Chittenden). 1898. p. 35 .....	A9.6:18
Twiggs, John D., jr. Road building, practical problems in. 1902. p. 53 .....	A22.3:23
Two-lined chestnut borer. <i>See</i> Chestnut borer.	
Tyloderma, breeding and other habits of some species of Curculionidæ, especially of, notes on (Webster). 1889. p. 109....	A9.7:2
Typhlocyba, parasitic castration of, by larva of Hymenopter and of a dipter (Giard). 1890. p. 271 .....	A9.7:2
Typhoon of Nov. 10, 1900, in Hongkong, note on (Abbe). p. 558...	A29.6:28
Typhoons of Orient, origin, paths, and limiting zones of (Bergholz). 1899. p. 402 .....	A29.6:27
Typhoons, origin of (Abbe). 1896. p. 417.....	A29.6:24
<i>See also</i> Baguios.	
Ugimya sericarlæ rond, parasite of Japanese silkworm (Mik). 1891. p. 113.....	A9.7:4
Uhler, Philip R. Heteroptera of Death Valley expedition. 1893. p. 260 .....	A5.5:7
Ulrich, J. C. Irrigation in Rocky Mountain States. 1899.....	A10.3:73
Ulsch method in determining nitric nitrogen in complete fertilizers. 1892. p. 88 .....	A7.3:35
Umbelliferæ, North American, monograph of (Coulter and Rose). 1900. p. 9 .....	A6.5:7
<i>See also</i> Hesperogenia — Leibergia — Mexican umbelliferæ.	
Uncinariasis. <i>See</i> Hookworm disease.	
Underdraining, practical notes on (Todd). p. 584.....	A1.1:870
<i>See also</i> Phreatic waters.	
Underflow and sheet waters of Nebraska (Hicks). 1893. pt. 3. p. 167.....	A15.2:Ir7 <sup>2</sup>
Underflow investigations, artesian and, reports of special agent in charge .....	A15.1:
Underhill, F. S. Artesian well investigation, field work in North Dakota. 1890. p. 105.....	A15.2:Ar7
Underwaters of Great Plains (Gregory). 1893. pt. 4, p. 3.....	A15.2:Ir7 <sup>2</sup>
Underwood, Lucien M.: Orange in Florida, diseases of. 1891. p. 27.....	A28.5:7
Pteridophyta of western Texas, description of. 1894. p. 557....	A6.5:2
Unfermented grape juice, preparation of (Beal). 1900. p. 27.....	A1.9:122
Union County, Georgia, cattle in, order releasing from quarantine. 1898 .....	A4.5:21
Same, Aug. 1, 1899.....	A4.5:41
United Kingdom: Agricultural imports of, 1896-1900 (Hitchcock). 1902.....	A12.3:26
Agricultural produce statistics of. 1893. p. 210 .....	A27.9:31
Land under cultivation in, 1868-69. p. 87.....	A27.9:8
<i>See also</i> England — Great Britain — Ireland.	
United States Propagating Garden. <i>See</i> Garden.	
Universities: Meteorology in (Abbe)— 1899. pp. 155, 420, 549.....	A29.6:27
1900. p. 165 .....	A29.6:28
1901. p. 264 .....	A29.6:29
Weather Bureau men in, note on (Abbe). 1900. p. 114.....	A29.6:28



Universities—Continued

*See also* Agricultural and mechanical colleges — Agricultural colleges — Colleges and universities, State — Johns Hopkins University — Purdue University — Washington University, St. Louis, Mo.

University boat crews. *See* Harvard and Yale boat crews.

University extension:

Agriculture at Cornell University (Craig). 1901. p. 137..... A10.3:99

Attitude of agricultural colleges toward (Voorhees). 1895. p. 49. A10.3:24

Work, how may it be best conducted by colleges of agriculture? (Roberts). 1898. p. 55 ..... A10.3:49

University lecturers, Weather Bureau men as, notes on (Abbe). 1899. pp. 258, 363, 420 ..... A29.6:27

University research at Washington, D. C., note on (Abbe). 1901. p. 314..... A29.6:29

University theses, abstracts of, notes on (Abbe). 1899. p. 114..... A29.6:27

Updyke, Stephen G. Artesian well investigation; field work in South Dakota. 1890. p. 110..... A15.2:Ar7

Urban population in South; country being deserted; whither are we tending? 1894. p. 572 ..... A27.9:32

Uredineæ:

New species of (Ellis and Everhart). 1891. p. 118..... A28.5:6

same (Ellis and Tracy). 1891. p. 43..... A28.5:7

Notes on certain (Anderson). 1891. p. 121..... A28.5:6

same (Dietel). 1891. p. 42..... A28.5:7

Urich, F. W. Insect pests of Trinidad, British West Indies, notes on some. 1893. p. 196..... A9.7:6

Urinary organs, diseases of:

Cattle (Law). p. 137 ..... A4.2:C29<sup>2</sup>

Horses (Law). p. 59 ..... A4.2:H78

Urine of horse, analysis of (Caldwell). p. 247..... A1.1:872

Uromyces:

Interesting (Halsted). 1889. p. 11 ..... A28.5:5

New species of, descriptions of (Tracy). 1891. p. 281..... A28.5:7

Uruguay:

Agricultural statistics of. 1894. p. 268 ..... A27.9:32

Agriculture in. 1891. p. 671 ..... A27.9:29

Bones and bone ash from, export of (Swalm). p. 519 ..... A4.1:900

Cattle disease in (Swalm). p. 385 ..... A4.1:898

Wheat production and exportation in, course of, 1880-1896 ..... A12.4:10

Wool growing in (Loggin). 1870. p. 436..... A27.9:8

Ustilagineæ:

New species of (Ellis and Everhart). 1891. p. 118 ..... A28.5:6

Notes on certain (Anderson). 1891. p. 121..... A28.5:6

*See also* Fungi, comomycetes.

Ustilago zeæ mays, abnormal structures in fungi induced by, study of (Knowles). 1889. p. 14 ..... A28.5:5

Utah:

Agricultural statistics of. 1865. p. 90 ..... A27.9:4

Birds observed in parts of, by Death Valley expedition of 1891, notes on (Fisher). 1893. p. 7..... A5.5:7

Blackleg in, vaccination against (Merrill). p. 469 ..... A4.1:899

Characteristics of, in relation to State weather-service work (Salisbury). 1894. p. 27 ..... A29.3:14

Electrical engineering in, development of (Jensen). 1898. p. 91. A10.3:49

Grasses of arid districts of, investigation of (Tracy). 1888. p. 5. A6.3:6

Sheep in, "big head" (disease) of (Rowe). p. 230 ..... A4.1:901

Southwest, almond in (Judd). p. 55 ..... A20.1:895

Southwestern—

cactuses, yuccas, and agave in deserts and desert ranges of, geographic and vertical distribution of (Merriam). 1893. p. 345 ..... A5.5:7

trees and shrubs in deserts and desert ranges of, notes on distribution of (Merriam). 1893. p. 285..... A5.5:7

Water administration in (Gemmell). 1902. p. 159..... A10.3:104

Water supply of, for season of 1900 as depending on snowfall (Murdoch). p. 497..... A29.6:28

# Index

Classification no.

## Utah—Continued

- Wingless grasshopper of (Glover). 1872. p. 74..... A27.9:10  
*See also* Bear River Valley—Big Cottonwood Creek—Cache County—Logan and Richmond canals—Salt Lake Valley—Sanpete County—Sevier Valley—Utah County—Weber County.
- Utah County, Utah, soil survey in (Means). 1900. p. 115..... A1.8:64
- Utica, N. Y., American Dairymen's Association at, Jan., 1871, notice of. p. 479 ..... A27.9:8
- Vaccination, Russian official experiments in, for rinderpest. 1866. p. 235..... A27.9:4
- Vaccine, distribution of letters relating to. 1900..... A4.4:28  
*See also* Blackleg.
- Valdez to Eagle, Alaska, trail from, reconnoissance of (Jones). p. 283 ..... A10.1<sup>2</sup>:901
- Valliant, M. Victor. Roads of Belgium. 1901. p. 87 ..... A22.3:21
- Van Bebber, W. J. *See* Bebber.
- Van Deman, H. E. *See*, for reports as Chief, Pomology Division, Agriculture Department, 1886-92..... A20.1:
- Van der Stok, J. P. Malay Archipelago, climate of. 1896. p. 669. A29.3:11<sup>3</sup>
- Van Diest, P. H. Geological conditions of artesian basins in eastern Colorado and New Mexico. 1890. p. 87..... A15.2:Ar7
- Vanessa antiopa:  
 Egg parasite of, oviposition of (Weed). 1900. p. 32 ..... A9.6:26  
 Stridulation in (Swinton). 1889. p. 307..... A9.7:1
- Vanessa californica, mountain swarming of (Hopkins). 1890. p. 355 ..... A9.7:2
- Vanilla culture as practiced in Seychelles Islands (Galbraith). 1898. A6.3:21
- Van Pelt, J. C. Good roads in Kentucky, organizations for. 1901. p. 81 ..... A22.3:21
- Van Slyke, Lucius Lincoln:  
 Address of, as president of Association of Official Agricultural Chemists, at 18th annual convention. 1901. p. 8 ..... A7.3:67  
 Albumen, determination of, in cow's milk. 1894. p. 188..... A7.3:43  
 Cheese, fat in, determination of. 1893. p. 116..... A7.3:38  
 Cows, milk of, casein in, determination of. 1893. p. 109..... A7.3:38  
 Milk—  
   acidity in, determination of. 1893. p. 117..... A7.3:38  
   calculation of total solids in, from per cent of fat and specific gravity, according to formulas of Babcock, Fleischmann, and of Hehner and Richmond, compared with gravimetric method. 1894. p. 193..... A7.3:43  
*See also*, as joint editor, 1895, Chemical analysis, method of.
- Vapor:  
 Aqueous, total quantity of, in atmosphere (Abbe). 1894. p. 539. A29.6:22  
 New determination of tension, notes on (Abbe). 1901. p. 74... A29.6:29  
 Pressure of, for water and ice, notes on (Abbe). 1899. p. 476.. A29.6:27  
 Psychrometric tables for obtaining pressure (Marvin). 1900 .... A29.2:P95  
 Saturated aqueous, pressure of, at temperatures below freezing (Thiesen). 1899. p. 106 ..... A29.6:29  
*See also* Atmosphere.
- Variegated cutworm. *See* Cutworm.
- Variety testing. *See* Plants.
- Vasey, George:  
 Agricultural grasses and forage plants of United States, and such foreign kinds as have been introduced..... A1.8:32  
 Botanical collectors, instructions to ..... A6.2:In7  
 Botanical Exchange Club, rules for ..... A6.2:B65  
 Botanical notes—  
   1872. pp. 222, 313, 381, 446, 505..... A27.9:10  
   1873. pp. 34, 115, 171, 247, 354, 503, 585 ..... A27.9:11  
   1874. pp. 50, 151, 330, 379, 438, 513 ..... A27.9:12  
   1875. pp. 126, 178, 313..... A27.9:13  
 [The more important articles are indexed under their various subjects.]
- Botany Division, record of some work of, including extracts from correspondence and other communications. 1889. p. 7..... A6.3:8

<b>Vasey, George—Continued</b>	
First words of, as Botanist, Department of Agriculture. 1872. p. 142 .....	A27.9:10
Forest trees, North American, distribution of. 1884. p. 38 .....	A1.7:5
Forest trees of United States—	
native and naturalized, catalogue of. p. 151.....	A1.1:875
which usually attain height of 16 feet or more, catalogue of. 1876 .....	A1.8:11
Grasses needed for agriculture in United States, and necessity for experiment stations. 1885. p. 168 .....	A1.7:9
Grasses of United States—	
descriptive catalogue of, including especially grass collections at New Orleans Exposition. 1885 .....	A6.2:G76
synopsis of tribes and genera, with descriptions of genera and list of species .....	A1.6:63
Grasses of United States and British America, monograph of. 1892. p. 1 .....	A6.5:3
Grasses—	
arid districts of Kansas, Nebraska, and Colorado, investigation of. 1886.....	A6.3.1
new, from Mexico, descriptions of. 1893. p. 281 .....	A6.5:1
new or noteworthy, from United States, description of. 1893. p. 267 .....	A6.5:1
North American, illustrations of. 2 vols. 1890-3 .....	A6.2:N82
Pacific coast, notes on some. 1893. p. 265.....	A6.5:1
Pacific slope. 2 pts. 1892-3 .....	A6.3:13
same, reissued. 1893 .....	A6.2:N82 <sup>2</sup>
South; a report on certain grasses and forage plants for cultivation in South and Southwest. 1887.....	A6.3:3
Southwest. 2 pts. 1890-1 .....	A6.3:12
same, reissued. 1891 .....	A6.2:N82 <sup>1</sup>
<i>See also</i> , for reports as Botanist, Botany Division, Agriculture Department, 1872-1892.....	A6.1:
<b>Vasey, George, and Collier, Peter:</b>	
Grasses and forage plants. p. 157.....	A1.1:878
<b>Vasey, George, and Rose, Joseph Nelson:</b>	
California, southern, plants collected by Edward Palmer in 1888, list of. 1890. p. 1 .....	A6.5:1
same, Lower California. 1889. p. 9.....	A6.5:1
Plants collected by Edward Palmer in 1889 at Lagoon Head, Cedros Island, San Benito Island, Guadalupe Island, and head of Gulf of California, list of. 1890. p. 9 .....	A6.5:1
Plants collected by Edward Palmer in 1890 in Lower California and western Mexico, at La Paz, San Pedro Martin Island, Raza Island, Santa Rosalia, Santa Agueda, and Guaymas, list of. 1896. p. 63.....	A6.5:1
<i>Vedalia cardinalis</i> in New Zealand (Wight). 1893. p. 194 .....	A9.7:6
<i>Vedalia</i> notes, some. 1891. p. 439.....	A9.7:3
<b>Veeder, M. A.:</b>	
Cipher code, international, for correspondence respecting the aurora and related conditions. 1894. p. 26 .....	A29.3:11 <sup>1</sup>
Storm tracks, periodic and nonperiodic fluctuations in latitude of. 1894. p. 185 .....	A29.3:11 <sup>1</sup>
<b>Vegetable cellulose. <i>See</i> Cellulose.</b>	
Vegetable crops, some insects injurious to (Chittenden). 1902.....	A9.6:33
Vegetable dietary, our, some additions to (Coville). 1895. p. 205..	A1.10:895
<b>Vegetable fibers. <i>See</i> Fibers.</b>	
Vegetable foods, dry, insects affecting (Chittenden). p. 112.....	A9.6:4
<i>See also</i> Chinese vegetable food materials.	
Vegetable garden (Greathouse). 1899 .....	A1.9:94
<i>See also</i> Farmers' vegetable garden.	
Vegetable nomenclature, work of experiment stations in reform of (Goff). 1891. p. 47.....	A10.5:3
Vegetable organisms, fatty bodies in, report on methods of estimation of (Maxwell). 1890. p. 94.....	A7.3:28
<b>Vegetable physiology:</b>	
Agricultural colleges (Stone). 1896. p. 99 .....	A10.3:41

# Index

	Classification no.
Vegetable physiology—Continued	
Curious phenomena in (Vasey). 1872. p. 446 .....	A27.9:10
Suggestions for investigations in, with special relations to agricul- ture (Goodale). 1897. p. 438 .....	A10.6:7
Vegetable Physiology and Pathology Division, Agriculture Depart- ment (formerly Division of Vegetable Pathology):	A28.
Herbarium of, some Peronosporaceæ in (Swingle). 1891. p. 109..	A28.5:7
Record of some work of, including extracts from correspondence and other communications (Galloway). 1889. p. 41 .....	A6.3:8
Work in (Woods). 1898. p. 261 .....	A1.10:898
Work of, for farmer (Galloway). 1897. p. 99 .....	A1.10:897
See also Botany Division.	
Vegetable products:	
Minor, and their sources. p. 170 .....	A1.1:870
Stored, some little-known insects affecting (Chittenden). 1897..	A9.6:8
Vegetable substances, nitrogenous compounds of, suggestions regard- ing nomenclature of (Atwater). 1899. p. 118 .....	A10.3:65
Vegetables:	
Commercial varieties, testing of (Tracy). 1900. p. 543 .....	A1.10:900
Cooking, losses in. 1898. p. 22 .....	A1.9:73
Desiccation of (Watts). 1875. p. 507 .....	A27.9:13
Experiments with fertilizers on, to study feeding capacities of plants and variations due to action of fertilizers. 1891 .....	A10.4:19
Losses in boiling, and composition and digestibility of potatoes and eggs. 1897 .....	A10.3:43
Originators of, list of, with addresses and names of specialties ....	A10.4:18
Protection of, from injury by heat or cold during transportation (Harrington). 1894 .....	A29.2:F94
Rules for naming. 1889 .....	A10.4:11
See also Asparagus—Beans—Beet—Bur or globe artichokes— Cabbage—Canadian field peas—Carrots—Celery—Cha- yote—Cucumbers—Cucurbits—Egg plant—Fruits and veg- etables—Garden vegetables—Horse-radish—Jerusalem arti- chokes—Lettuce—Melons—Onions—Peas—Potatoes— Sugar beets—Sweet potatoes—Tomatoes—Znaim cucumbers.	
Vegetables, canned:	
Adulteration of (McElroy). 1893. p. 1015 .....	A7.3:13 <sup>a</sup>
Analysis of, provisional method for (Munson). 1902. p. 50 ....	A7.3:65
Statistics of, 1886-87. p. 426 .....	A27.9:28
"Swells in," cause and prevention of. 1898. p. 28 .....	A1.9:73
Vegetation:	
Alkali soils and, some mutual relations between (Kearney and Cameron). 1902 .....	A1.8:71
Characteristic, of desert region from western Texas to central Arizona (Dewey). p. 351 .....	A1.1:891
same. p. 351 .....	A6.1:891
Chemistry of (Abbe). 1899. p. 361 .....	A29.6:27
Effect of moon on, notes on (Kimball). 1901. p. 215 .....	A29.6:29
Insects destructive to, general observations on (Neal). 1883. p. 35 .....	A9:3:1
Meteorological observations considered with special reference to influence on (Schreiber). 1895. p. 395 .....	A29.3:11 <sup>a</sup>
Season of, 1894-1901. p. 369 .....	A29.6:30
Winds injurious to crops and (Curtis). 1895. p. 435 .....	A29.3:11 <sup>a</sup>
See also Climate and vegetation.	
Vegetation house arranged for pot experiments (Britton). 1901. p. 152 .....	A10.3:99
Veitch, F. P. Phosphoric acid rendered soluble by digestion with ammonium citrate at 65° C., amount of washing required to remove. 1896. p. 73 .....	A7.3:49
Velvet bean:	
Report on (Smith). 1899 .....	A3.4:14
Valuable forage crop and soil renovator. 1898. p. 12 .....	A1.9:78
Venezuela, statistical view of. 1890. p. 469 .....	A27.9:28
Venezuelan cattle, shipments of, to Cuba (Ellsworth). p. 516 .....	A4.1:899
Ventura area, California, soil survey of (Holmes and Mesmer). p. 521 .....	A26.5:901 <sup>1</sup>

	Index Classification no.
Vera Cruz, Mexico, northers of (Abbe). 1894. pp. 226, 363.....	A29.6:21
Vergnette-Lamotte, Girard Elisabeth Alfred, Vicomte de. Grape mildew, remedy for. 1886. p. 80 .....	A6.3:2
Vermilion Parish, La., soils and products of (Rapley). 1884. p. 17..	A1.8:35
Verminous bronchitis. <i>See</i> Bronchitis.	
Verminous diseases of cattle, sheep, and goats in Texas, further in- vestigations on (Stiles). p. 223.....	A4.1:901
Verminous diseases of cattle, sheep, and goats in Texas (Stiles). p. 357 .....	A4.1:900
Vermont:	
American merinos of. p. 484.....	A1.1:865
Farm resources and products of. 1868. p. 6.....	A27.9:6
Landslide in, note on (Abbe). 1897. p. 307 .....	A29.6:25
Road improvement in, extract from governor's message (Smith). p. 10.....	A22.4:33
same (Grout). p. 13 .....	A22.4:33
<i>See also</i> Rutland County.	
Vermont Association of Road and Trotting Horse Breeders, exhibi- tion of (Romaine). p. 441 .....	A4.1:889-90
Very, Frank W.:	
Atmospheric radiation, research conducted at Alleghany Observa- tory and at Providence, R. I. 1900.....	A29.5:G
Cloud phenomena attending hailstorms. 1894. p. 292.....	A29.6:22
Potomac River, phenological observations on. 1900. p. 154 ....	A29.6:28
Solar constant, report on. 1901. p. 357 .....	A29.6:29
Vespertilionidæ, family. <i>See</i> Bats.	
Vessels, stranded, Captain Dansey's kite for (Abbe). 1897. p. 206.	A29.6:25
Vetch, hairy, sand, or Russian (Scribner). 1895 .....	A3.4:2
Vetches, cultivated (Smith) .....	A3.4:6
Veterinarians:	
Experiment station, and local veterinarians in State, desirability of cooperation between (Bitting). 1898. p. 20.....	A4.3:22
same. p. 426.....	A4.1:898
Experiment station, as member of State board of health (Reynolds). 1898. p. 14.....	A4.3:22
Experiment station, exhibit of, at Paris Exposition, 1900 (Peters). 1898. p. 22.....	A4.3:22
Laboratory records for (Bitting). 1898. p. 18 .....	A4.3:22
State, list of—	
1898. p. 603 .....	A4.1:898
same. p. 616.....	A1.10:898
1899. p. 530 .....	A4.1:899
same. p. 698.....	A1.10:899
1900. p. 653 .....	A1.10:900
1901. p. 628 .....	A1.10:901
Value to, of cooperative experiments (Lewis). 1898. p. 24.....	A4.3:22
<i>See also</i> Omaha, Nebr., Experiment Station veterinarians.	
Veterinary congresses, international. <i>See</i> Baden-Baden — Brussels.	
Veterinary Division, Agriculture Department, report of:	
1881 and 1882. p. 257 .....	A1.1:881-2
1883 (Salmon). p. 17.....	A1.1:883
<i>See also</i> note under A1.4.	
Veterinary science and practice, abstracts of reports of agricultural experiment stations on, 1889-1902.....	A10.6
Veterinary zoology. <i>See</i> Zoology.	
Vettin, Ulrich Franz Friedrich. Atmosphere, upper, study of, by means of cloud observations. 1896. p. 758 .....	A29.3:11 <sup>s</sup>
Viala, Pierre. <i>See</i> , as joint author, Scribner, Frank Lamson-.	
Victoria, Australia:	
Irrigation in, recent investigation, legislation, and administration (Hinton). 1891. p. 235 .....	A15.2:P94 <sup>1</sup>
Wheat crop of. 1894. p. 26 .....	A27.9:33
<i>See also</i> Melbourne.	
Vienna, Austria, dead animals in, disposition of (Hogue). p. 350...	A4.1:899
Vienna, Austria, first international congress of agriculture and forestry, 1873, decisions of. p. 495.....	A27.9:12



# Index

	Classification no.
Vienna, Austria, International Exhibition, 1894, notice relating to ..	A1.2:V67
Vieth, P. Volatile acids present in butter fat, quantity of. 1889. p. 99.	A7.3:24
Vine:	
Culture and products, report to United States Commission of Paris Exposition of 1867 (Wilder and others). p. 164.....	A1.1:867
Culture and products of the. 1868. p. 146.....	A27.9:6
Disease of, in France (Price). 1873. p. 172.....	A27.9:11
Mineral nutrition of, for production of wine (McMurtrie). 1882. p. 180 .....	A1.8:22
Parasitic diseases of, congress on. See Florence, Italy.	
See also Grape — Grapevine — Wine.	
Vine culture institute. See Geisenheim-on-the-Rhine, Prussia.	
Vinegar:	
Analysis of, provisional method for (Frear). 1902. p. 62.....	A7.3:65
Insects affecting (Howard). 1896. p. 100 .....	A9.6:4
Vinegar eel ( <i>Anguillula aceti</i> ), infection in human bladder, case of (Stiles and Frankland). 1902. p. 35 .....	A4.3:35
Vineland, N. J.:	
Grapevine, downy mildew and black rot of, treatment with salts of copper at. 1887. p. 17.....	A6.3:5
same. 1888. p. 13.....	A6.3:10
Lesson in colonization. p. 410.....	A1.1:869
Vineyard, home, with special reference to northern conditions (Ragan). 1902.....	A1.9:156
Vinke, Albertus. Animals, dead, disposition of, in Amsterdam. p. 361 .....	A4.1:899
Vintage, Rhine, note on. 1888. p. 578.....	A27.9:26
Violet:	
Insects injurious to, some (Chittenden). 1901.....	A9.6:27
Spot disease of (Dorset). 1900 .....	A28.3:23
Violet pest, new, report on (Coquillett). 1900. p. 48.....	A9.6:22
Virchow, Rudolf. American trichinae. 1884. p. 181.....	A4.3:30
Virginia:	
Agriculture of, status in 1870. p. 267 .....	A1.1:870
Cattle quarantine of counties in—	
Dec. 16, 1897. p. 8 .....	A4.5:8-14
Dec. 20, 1898. p. 4 .....	A4.5:25-29
Dec. 19, 1899. p. 8 .....	A4.5:49-55
Dec. 14, 1900. p. 7 .....	A4.5:80-87
Dec. 27, 1902. p. 13 .....	A4.5:101
Eastern, negroes in, dietary studies among, in 1897 (Frissell). 1899. p. 7 .....	A10.3:71
same, in 1898 (Bevier). 1899. p. 27 .....	A10.3:72
Farm resources and products of. 1868. p. 67 .....	A27.9:6
Her past, present, and future (Janney). p. 17 .....	A1.1:864
Horses in, disease known as "staggers" among (Harbaugh). p. 209	A4.1:886
Insect injury to chestnut and pine trees in neighboring States and (Chittenden). 1897. p. 67 .....	A9.6:7
Marl, region of. p. 389 .....	A1.1:868
Orchards in, injuries to, by red-legged flea-beetle (Schwarz). 1893. p. 334 .....	A9.7:5
Peanut crop in. 1875. p. 512.....	A27.9:13
Pleuro-pneumonia among cattle in, investigation of (Rose). p. 51.	A1.1:881-2
Potomac lands of, for agricultural purposes. 1872. p. 16 .....	A27.9:10
San Jose scale in (Coquillett). 1894. pp. 253, 324.....	A9.7:6
Southern cattle fever in (Rose). p. 461 .....	A4.1:884
Swine plague in (Payne). 1879. p. 165 .....	A1.6:12
same (Rose). p. 446.....	A4.1:884
Tide-water region of. 1866. p. 413 .....	A27.9:4
Wheat culture in (Pleasants). 1869. p. 231 .....	A27.9:7
See also Bedford — Charlottesville — Dismal swamp — James River — Morrisville — Norfolk — Prince Edward — Rich- mond — Skyland.	
Virginia good roads convention, Richmond, Va., Oct. 10, 11, 1895:	
Proceedings of. 1895 .....	A22.3:11
Report of committee on legislation adopted by. 1895 .....	A22.4:18



	Index Classification no.
Viticulture:	
California. 1882. p. 99.....	A1.8:20
same (Sargent). p. 157.....	A1.8:22
Hungary, statistics of. 1876. p. 427.....	A27.9:14
Quarantine rules of California. 1882. p. 166.....	A1.8:20
<i>See also</i> Evans, Walter H.	
Viviparous cockroach, report on (Riley). 1891. p. 443.....	A9.7:3
Vivisection in District of Columbia. 1896.....	A1.4:2
Volatile acids:	
Determination of total, in butter (Goldmann). 1890. p. 112....	A7.3:24
Fatty, of butter, contribution to study of (Spallanzani). 1890. p. 104.....	A7.3:24
Quantity of, present in butter fat (Vieth). 1890. p. 99.....	A7.3:24
Variations of, in butter fat (Menozzi). 1890. p. 111.....	A7.3:24
Volcanic dust, note on. 1902. p. 369.....	A29.6:30
Volcanic eruptions, Hawaiian, report on (Lyons):	
1897. p. 144.....	A29.6:27
1899. p. 298.....	A29.6:27
Volcanic phenomena (Hobbs). 1902. p. 487.....	A29.6:30
Voles:	
American, of the genus <i>Microtus</i> , revision of (Bailey). 1900....	A5.5:17
Genera and subgenera of (Miller). 1896.....	A5.5:12
Volker, Hermann. Snow and ice measurements. 1889. p. 142....	A29.3:24
Volta, memorial to (Abbe). 1898. p. 366.....	A29.6:26
Volumetric apparatus, committee on standards for, of Association of Official Agricultural Chemists, report on. 1897. p. 137.....	A7.3:51
Same. 1900. p. 146.....	A7.3:62
Volumetric method of estimating phosphoric acid, Kilgore's modifi- cation of (Williams). 1901. p. 55.....	A7.3:62
Voluntary observers. <i>See</i> Weather observers, voluntary.	
Von Herrmann, C. F. North Carolina, climate and crops in. 1889-98. p. 544.....	A29.6:26
Von Lookren, C. J. Food, influence of, on composition of butter. 1890. p. 141.....	A7.3:24
Von Schrenk, Herman. <i>See</i> Schrenk, Herman von.	
Von Schweinitz. <i>See</i> De Schweinitz.	
Von Tavel, Franz. Pyrenomycetes, history of development of, con- tributions to. 1889. pp. 53, 113, 181.....	A28.5:5
Voorhees, Edward Burnett:	
Address of, as president of Association of Official Agricultural Chemists, at 11th annual meeting. 1894. p. 7.....	A7.3:43
Agricultural Colleges, attitude of, toward university extension. 1894. p. 49.....	A10.3:24
Commercial fertilizers, composition and use. 1896.....	A1.9:44
Farmers' institute as promoter of closer intimacy between farmers and experiment stations. 1902. p. 78.....	A10.3:120
Field experiments, cooperative, report on. 1901. p. 116.....	A10.3:99
Food and nutrition investigations in New Jersey in 1895 and 1896.	A10.3:35
Gunning-Kjeldahl method and a modification applicable in pres- ence of nitrates. 1892. p. 85.....	A7.3:35
Irrigation in New Jersey, report on—	
1900.....	A10.3:87
1902. p. 353.....	A10.3:119
Milk, quality of, should selling be regulated by? 1896. p. 91...	A10.3:41
New Jersey, farmers' institute work accomplished in. 1902. p. 37.	A10.3:120
Schools, public, how may farmers' organizations hasten teaching of agriculture in? 1902. p. 89.....	A10.3:120
Tomato growing. 1898.....	A1.9:76
<i>See also</i> , as joint author, Phelps, C. S.	
Voorhees, Louis A.:	
Bread, process of making, losses in. 1899. p. 37.....	A10.3:67
Fungicides and insecticides, report on, before Association of Official Agricultural Chemists—	
1899. p. 101.....	A7.3:57
1900. p. 139.....	A7.3:62
1901. p. 87.....	A7.3:67

# Index

	Classification no.
Vose, Elisha C. Storage battery, use of, for electrical recording instruments. 1899. p. 300 .....	A29.6:27
Voyle, Joseph:	
Scale insects affecting orange, experiments upon. 1883. p. 19 ..	A9.3:1
Scale insects of orange in Florida, report on effects of cold upon. 1884. p. 70 .....	A9.3:4
Voyles, D. W.:	
Swine plague in Indiana—	
1878. p. 421 .....	A1.1:878
1879. p. 112 .....	A1.6:12
Vuyst, Paul de:	
Agricultural associations in Belgium. 1898. p. 3 .....	A10.6:9
Agricultural education in Belgium. 1893. p. 703 .....	A10.6:4
Wages:	
Agricultural, in France, 1876. p. 421 .....	A27.9:14
Farm labor in United States—	
1890. p. 200 .....	A27.9:28
1840-1892 .....	A27.8:4
1866-1899, results of eleven statistical investigations .....	A27.8:22
Farm laborers in United States—	
1867. p. 4 .....	A27.9:5
1870. p. 3 .....	A27.9:8
1875. p. 261 .....	A27.9:13
Wagner, Balthasar. Rye gall-gnat, new crop, 1861, observations on, translated by C. F. Gissler. 1883. App., p. 8 .....	A8.1:3
Wagner method of pot culture (Lindsey). 1897. p. 77 .....	A10.6:7
Wagon roads. <i>See</i> Roads.	
Wahl, Robert. Indian corn (or maize) in manufacture of beer. 1893.	A1.8:52
Wait, Charles Edmund:	
Dietary studies at University of Tennessee in 1895 .....	A10.3:29
Muscular work, experiments on effect of, upon digestibility of food and metabolism of nitrogen, conducted at University of Tennessee, 1897-1899 .....	A10.3:89
same, 1899-1900 .....	A10.3:117
Nutrition investigations at University of Tennessee in 1896 and 1897 .....	A10.3:53
Wait, Robert E. Agriculture Department, work of, as illustrated at Atlanta Exposition. p. 503 .....	A1.10:895
Waite, Merton Benway:	
Fungicides, experiments with, in removal of lichens from pear trees. 1891. p. 264 .....	A28.5:7
Pear blight, cause and prevention of. 1895. p. 295 .....	A1.10:895
Pear culture, commercial. 1900. p. 369 .....	A1.10:900
Pear leaf-blight in orchard, treatment of. 1891. p. 333 .....	A28.5:7
Peronospora, two new species of, description of. 1891. p. 105 ..	A28.5:7
Pollination of pear flowers .....	A28.3:5
Pollination of pomaceous fruits. 1898. p. 167 .....	A1.10:898
Wakker's hyacinth germ ( <i>Pseudomonas hyacinthi</i> ) (Smith). 1901 ..	A28.3:26
Waldo, Frank. Meteorology, theoretical, in United States, 1855 to 1890, some remarks on. 1895. p. 317 .....	A29.3:11 <sup>2</sup>
Waldron, C. B. Grasshoppers in North Dakota, with introduction by H. E. Stockbridge. 1892. p. 13 .....	A9.3:27
Walfinger, John F. Green manuring and manures. p. 299 .....	A1.1:864
Walker, J. B., farm of, Concord, N. H. 1870. p. 76 .....	A27.9:8
Walker, Philip:	
Serimeter, report of. 1889. p. 333 .....	A9.7:1
Serrell automatic silk reel, report of. 1887. p. 52 .....	A9.3:14
Silk culture, report of year's operations. p. 111 .....	A1.1:888
same. p. 111 .....	A9.1:888
Silk culture by Department of Agriculture in 1887. p. 115 .....	A1.1:887
Silk, raw, tenacity, elasticity, and ductility of. 1889. p. 309 ...	A9.7:1
Silkworm, grasserie of. 1891. p. 445 .....	A9.7:3
Silkworms, how to raise. 1890 .....	A25.3:1
Theophila mandarina, history of, contribution to. 1889. p. 270 ..	A9.7:1
<i>See also</i> , for reports as Chief, Silk Section, Agriculture Denart-ment, 1889 and 1890 .....	A25.1:
Wallace, Henry. Flax culture in Ireland and Belgium. 1892. p. 47.	A11.5:4

# Index

## Classification no.

Wallace, Paul. Silk culture, abstract of note on. 1891. p. 64.....	A9.7:4
Wallace, Shippen. See, as collaborator, Wiley, Harvey Washington.	
Waller, Osmar L.: Engineering-degree courses, four-year, what shall be the character of preparatory work required to enter? 1899. p. 75.....	A10.3:65
Irrigation in— Washington State, use of water in 1901. 1902. p. 191.....	A10.3:119
Yakima Valley, Wash., use of water in. 1902. p. 241.....	A10.3:104
Wallis, H. Sowerby. Rainfall and charts of rainfall. 1902. p. 228.	A29.6:30
Walnut spanworm, report on (Coquillett). 1897. p. 64.....	A9.6:7
Walnuts. See English walnuts.	
Walsh, Benjamin Dann, more important entomological writings of, bibliography of (Henshaw) .....	A9.2:B47 <sup>1-3</sup>
Walsh, Benjamin Dann, and Riley, Charles Valentine, more im- portant joint entomological writings of, bibliography of (Hen- shaw). 1889. p. 51.....	A9.2:B47 <sup>1-3</sup>
Walsh, M. C. St. Louis tornado, origin of. 1897. p. 308.....	A29.6:25
Walsingham, Lord: Argyresthia, notes on, with descriptions of new species. 1890. p. 117.....	A9.7:3
Chambers's index of Tineina of U. S. and Canada, steps toward a revision of, with notes and descriptions of new species— 1888. v. 1. pp. 81, 113, 145, 254, 287.....	A9.7:1
1889-90. v. 2. pp. 23, 51, 77, 116, 150, 284, 322.....	A9.7:2
1891. v. 3. pp. 325, 386 .....	A9.7:3
1892. v. 4. p. 384.....	A9.7:4
Tortricid, new, from California, description of. 1891. p. 465....	A9.7:3
Waltemath's (George), moon, notes on (Abbe). 1898. p. 19.....	A29.6:26
Walz, Ferdinand J.: Chicago weather forecast district, monthly report of, Apr., July, Oct., 1901 .....	A29.6:29
same, Apr., 1902 .....	A29.6:30
Climate, studies of. 1899. p. 136.....	A29.3:24
Meteorological and crop reporting stations, voluntary. 1898. p. 208.....	A29.6:26
Temperatures, study of, at Baltimore, Md. 1899. p. 293 .....	A29.6:27
Weather Bureau and the public, relations between. 1899. p. 12.	A29.3:24
Weather forecasts, general and local, relation between. 1902. p. 117.....	A29.3:31
Wamer, William D. American dried apples in Cologne. 1895. p. 14.	A7.3:48
Wappenhans, C. F. R., short biography of (Williams). 1902. p. 87.	A29.6:30
War debts, State. 1866. p. 93 .....	A27.9:4
Warbles in cattle. See Cattle.	
Ward, Edward G., jr. Railroad freight classifications, changes in, 1900 .....	A27.4:12
Ward, Edward G., jr., and Holmes, Edwin S., jr. Garden truck, rates of charge for transporting, with notes on growth of the industry. 1901 .....	A27.8:21
Ward, H. Marshal. Smut fungi, report on. 1889. p. 87 .....	A28.5:5
Ward, Robert De Courcy: Barograph curve, winter, from South Pacific ocean. 1897. p. 484.	A29.6:25
Clouds, cumulus, over a fire, observation of. 1898. p. 104.....	A29.6:26
Meteorological station, highest, in world, visit to. 1898. p. 150.	A29.6:26
Thunderstorms in New England, investigation of. 1893. p. 30..	A29.3:9
Warder, J. T. Mule raising. p. 180.....	A1.1:863
Warder, Jno. A. See, as joint author, Moorhead, J. K.	
Warder, Robert B. Phosphoric acid, reverted, remarks on. 1889. p. 184.....	A7.3:24
Warder, William. Flour, manufacture of. p. 423.....	A1.1:862
Warington, Robert: Nitric acid in soils, determination of, by Schloesing's method, at Rothamsted Laboratory. 1886. p. 47 .....	A7.3:11
Rothamsted Experimental Station, England, investigations at, six lectures on, delivered under provisions of Lawes Agricul- tural Trust. 1892.....	A10.3:8
Warm wave: July and August, 1892 (Garriott). 1892. p. 223.....	A29.6:20

# Index

	Classification no.
Warm wave—Continued	
March 27-29, 1895 (Abbe). p. 94.....	A29.6:23
Washed soils; how to prevent and reclaim them. 1894.....	A1.9:20
Washes. <i>See</i> San Jose scale.	
Washington, D. C.:	
Elm leaf-beetle in (Marlatt). 1895. p. 47 .....	A9.6:2
Graduate study at—	
note on (Abbe). 1902. p. 134 .....	A29.6:30
report of committee of Association of Agricultural Colleges	
and Experiment Stations on. 1898. p. 58 .....	A10.3:65
same. 1900. p. 55 .....	A10.3:99
Grape culture near. 1873. p. 282 .....	A27.9:11
Grass insects in, notes on (Osborn). 1891. p. 197 .....	A9.7:4
Hot summers and cold winters at, 1872-98 (Gillam). p. 456 .....	A29.6:26
Optical phenomena at, Feb. 13, 1895 (Abbe). p. 56 .....	A29.6:23
Precipitation at, 1874-91. p. 79 .....	A29.6:20
Sewage deposit of, value of (Antisell). 1869. p. 228 .....	A27.9:7
Thunderstorms near, report on (Cragin and Cragin). 1900. p.	
287 .....	A29.6:28
Trees of. 1891 .....	A13.2:T71
University research at, note on (Abbe). 1901. p. 314.....	A29.6:29
Wind-rush at, Sept. 29, 1896 (Hazen). p. 322.....	A29.6:24
<i>See also</i> District of Columbia.	
Washington, Mount, fluctuations of temperature and pressure at base	
and summit of (Hazen). 1891. pp. 171, 199, 224, 250.....	A29.6:19
Washington State:	
Agricultural notes on. 1866. p. 379.....	A27.9:4
Agricultural resources of (Ritz). 1869. p. 384*.....	A27.9:7
Agriculture in, statistics of (Simmons). 1869. p. 370 .....	A27.9:7
Dark day in (Eells). 1902. p. 440.....	A29.6:30
Farm resources and products of. 1868. p. 277 .....	A27.9:6
Farmers' institute work accomplished in (Spillman). 1902. p. 43.	A10.3:120
Forests of (Brown). 1884. p. 388.....	A13.5:4
Grasses of, plates and descriptions of (Vasey). 1892 .....	A6.2:N82 <sup>2</sup>
same.....	A6.3:13
Hop louse in, experiments with (Koebele). 1893. p. 12 .....	A9.7:6
Irrigation in, use of water in, 1901 (Waller). 1902. p. 191 .....	A10.3:119
Irrigation in eastern part, in 1890 (Nimmo). p. 149 .....	A15.2:P94 <sup>1</sup>
Tide lands of (Morse). 1885. p. 62.....	A1.7:7
Weather forecasts for, notes on, 1895-99 (Abbe). p. 313.....	A29.6:27
<i>See also</i> Pacific Northwest—Rainier, Mount—Spokane—Yakima	
Valley.	
Washington University testing laboratory, St. Louis, Mo., mechani-	
cal tests of woods made at (Johnson). 1893. p. 3 .....	A13.3:8
Washita County, Okla., quarantine order for, Aug. 4, 1899.....	A4.5:42
Washouts, warnings of, for benefit of transportation companies	
(Smith). 1899. p. 37 .....	A29.3:24
Same (Outram). 1899. p. 38 .....	A29.3:24
Wasp. <i>See</i> Digger-wasp — Paper-making wasp.	
Wastes of London, method of disposing of (Manning). 1872. p. 379.	A27.9:10
<i>See also</i> Sewage.	
Water:	
Administration in Utah (Gemmell). 1902. p. 159 .....	A10.3:104
Alkali, salt content of, instructions for determining in field	
(Whitney) .....	A26.4:6
Amity Canal, Colorado, duty under (Berry). 1900. p. 159 .....	A10.3:86
Atmospheric refractions at surface of (Abbe). 1896. p. 371.....	A29.6:24
Big Cottonwood Creek, Utah, duty of, 1899 (Gemmell). p. 197 ..	A10.3:86
same, 1900 (Gemmell). p. 165 .....	A10.3:104
Boise Valley, Idaho, duty of, as related to irrigation problems of	
(Ross). 1900. p. 219 .....	A10.3:86
Butter, water in. 1901. p. 30 .....	A1.9:133
California, central, methods of applying, to land, as practiced in	
(Grunsky). 1891. Pt. 1. p. 307.....	A15.2:Ir7 <sup>2</sup>
Capillary movement of, in dry and moist soils (Briggs and Lap-	
ham). 1902. p. 19.....	A26.3:19

\* By a misprint, this page number appears twice.

**Water—Continued**

Destitute region (Curtiss). p. 230 .....	A1.1:867
Distilled, for drinking purposes (Beal). 1901. p. 5 .....	A1.9:124
Drinking, protection of, on farm (Smith). 1896 .....	A1.9:43
Duty of, general instructions to observers (Mead). 1899 .....	A10.8:2
Evaporation of, from soils, salts as influencing rate of (Briggs). 1900. p. 184 .....	A1.8:64
Factor in the growth of plants (Galloway and Woods). 1894. p. 165 .....	A1.10:894
Gage Canal, Riverside, Cal., duty of, 1900 (Irving). 1902. p. 137.	A10.3:104
same, 1901 (Irving). p. 146 .....	A10.3:119
Gallatin Valley, Montana, duty of (Fortier). 1900. p. 175 .....	A10.3:86
High—	
effect of gales in causing (Abbe). 1894. p. 297 .....	A29.6:21
studies on (Abbe). 1894. p. 372 .....	A29.6:22
Hot, frost protection by, note on (Abbe). 1900. p. 110 .....	A29.6:28
Idaho, duty of (Ross). 1902. p. 221 .....	A10.3:104
Irrigation, use of, report of investigations made in 1899, includ- ing reports of special agents and observers. 1900 .....	A10.3:86
Kings River, Cal., appropriation (Grunsky). 1901. p. 259 .....	A10.3:100
Lake, temperature of (Abbe). 1898. p. 167 .....	A29.6:26
Laramie Plains, Wyo., duty of, 1899 (Fairfield). 1902. p. 215 ..	A10.3:104
Level of—	
fluctuation of—	
Great Lakes (Guthrie). 1896. p. 420 .....	A29.6:23
Lake Erie (Henry). 1902 .....	A29.5:J
in Great Salt Lake (Gilbert). 1901. p. 23 .....	A29.6:29
same (Murdock). 1901. p. 22 .....	A29.6:29
Movement and retention of, in soils. 1898. p. 399 .....	A1.10:898
Nebraska, duty of (Stout). 1900. p. 149 .....	A10.3:86
Physiological rôle of, in plants (Gain). 1897. p. 3 .....	A10.6:8
Pure, on the farm, importance of. 1898. p. 3 .....	A1.9:73
Search for, use of divining rod in, note on (Abbe). 1900. p. 109.	A29.6:28
Supply of—	
and irrigation in Mexico. 1885. p. 223 .....	A15.2:Ir7 <sup>1</sup>
notes on experience of other countries in administration of (McKinney). 1891. p. 261 .....	A15.2:P94 <sup>1</sup>
Temperature of, in wells, notes on (Kimball). 1901. p. 510 ....	A29.6:29
Temperatures of Great Lakes (Conger). 1899. p. 352 .....	A29.6:27
Tule River Basin, Cal., duty of (Chandler). 1902. p. 159 .....	A10.3:119
Use of, for irrigation at Wheatland, Wyo. (Johnston). 1902. p. 207 .....	A10.3:104
Vapor pressure for, notes on (Abbe). 1899. p. 476 .....	A29.6:27
Wyoming, duty of (Johnston). 1900. p. 171 .....	A10.3:86
Yakima Valley, Wash., use of, in irrigation (Waller). 1902. p. 241 .....	A10.3:104
Yuba River, use of (Connick). 1901. p. 130 .....	A10.3:100
<i>See also</i> Drainage water — Irrigation — Phreatic waters — and headings beginning Water.	
Water-bearing gravels and formations tributary to underground water supply of Salinas Valley, Monterey County, Cal. (Nutter). 1901. p. 208 .....	A10.3:100
Water bug:	
Found by J. D. Zabriskie, note on (Bergroth). 1892. p. 321 ...	A9.7:4
Interesting, report of. 1893. p. 188 .....	A9.7:5
Water glass, preserving eggs in (Beal). 1899. p. 17 .....	A1.9:103
Water hyacinth and its relation to navigation in Florida (Webber). 1897 .....	A6.3:18
Water laws:	
Colorado (Field). 1899. p. 39 .....	A10.3:58
Nebraska (Wilson). 1899. p. 58 .....	A10.3:58
Water rights:	
Canadian northwest irrigation act (Dennis). 1901. p. 11 .....	A10.3:96
Interstate, in Bear River (Breckons). 1899. p. 26 .....	A10.3:70
Irrigation and, abstract of laws of States and Territories on (Critchett). 1893 .....	A15.3:1
Los Angeles River, Cal., study of (Boggs). 1901. p. 327 .....	A10.3:100



# Index

	Classification no.
<b>Water rights—Continued</b>	
Missouri River and tributaries (Mead). 1899.....	A10.3:58
Problems of Bear River. 1899.....	A10.3:70
Yuba River, Cal., features and (Manson). 1901. p. 115.....	A10.3:100
<i>See also</i> Mead, Elwood.	
<b>Water-rotting hemp. <i>See</i> Hemp.</b>	
<b>Water storage, problems of, on torrential streams of Southern California as typified by Sweetwater and San Jacinto rivers (Schuyler). 1901. p. 353 .....</b>	<b>A10.3:100</b>
<b>Water supply:</b>	
Bear River and its diversion (Johnston). 1899. p. 9.....	A10.3:70
Conservative lumbering, and discussion of (Newell). 1901. p. 3.	A13.3:30
Depending on snowfall for, 1900 (Abbe). p. 493.....	A29.6:28
Effect of forest clearing and cultivation on (Fulton). 1899. p. 89.	A29.3:24
same (Salisbury). 1899. p. 91.....	A29.3:24
Influence of forests on (Fernow). p. 297.....	A13.1:889
Relation of, to animal diseases (Bitting). p. 471 .....	A4.1:899
Relation of forests to (Fernow). 1893. p. 123 .....	A13.3:7
Relation to animal diseases. 1899. p. 17 .....	A1.9:97
Subterranean, of San Bernardino Valley and its utilization, studies of (Hilgard). 1902. p. 103 .....	A10.3:119
<i>See also</i> Water.	
<b>Waterhouse, Sylvester:</b>	
Abutilon avicennae in New Jersey, cultivation of, letter relative to. p. 606 .....	A1.1:878
<b>Jute culture—</b>	
importance of the industry. 1883 .....	A1.8:30
national importance, etc. p. 289 .....	A1.1:876
<b>Watering troughs for teams. 1870. p. 89.....</b>	<b>A27.9:8</b>
<b>Watermelon, wilt disease of (Smith). 1899 .....</b>	<b>A28.3:17</b>
<b>Waters, H. J.:</b>	
Agricultural colleges, what should be taught at? 1896. p. 73 ...	A10.3:41
Irrigation experiments at Missouri Experiment Station, 1901. 1902. p. 305 .....	A10.3:119
<b>Waterspouts:</b>	
Cape May, N. J. 1902. p. 487.....	A29.6:30
Close range (Fassig). 1902. p. 302 .....	A29.6:30
Cloudburst, or tornado, note on (Abbe). 1897. p. 207 .....	A29.6:25
Great Lakes, notes on (Abbe). 1898. p. 364 .....	A29.6:26
Key West, Fla. (Boynton). 1899. p. 351 .....	A29.6:27
Long Island (Abbe). 1897. p. 207.....	A29.6:25
Norfolk, Va., on Aug. 6, 1901 (Gray). p. 372 .....	A29.6:29
Notes on (Abbe). 1898. pp. 67, 261 .....	A29.6:26
same (Abbe). 1900. p. 115 .....	A29.6:28
San Diego, report on (Carpenter). 1898. p. 545.....	A29.6:26
September 29, 1898, note on (Abbe). p. 567 .....	A29.6:26
<b>Waterworks east of arid regions having supply from artesian and underflow sources. 1891. pt. 1., p. 433.....</b>	<b>A15.2:Ir7<sup>2</sup></b>
<b>Watkins, James L.:</b>	
<b>Cotton—</b>	
American, future demand for. 1901. p. 193 .....	A1.10:901
production and price of, for 100 years. 1895.....	A27.8:9
same, abstract .....	A27.8:C82
<b>Cotton crop of—</b>	
1895 .....	A27.4:4
1896-97 .....	A27.9:35
1897-98 .....	A27.4:9
1898-99 .....	A27.8:17
1899-1900 .....	A27.8:19
<b>Cotton production, cost of. 1899 .....</b>	<b>A27.8:16</b>
<b>Watson, George Catchpole. Fowls, care and feeding. 1896.....</b>	<b>A1.9:41</b>
<b>Wattle bark or mimosa bark, report on. p. 507 .....</b>	<b>A1.1:878</b>
<b>Wattle tree, introduction into Southern States (Keffer). 1895. p. 19.</b>	<b>A13.3:11</b>
<b>Watts, Frederick:</b>	
<b>Address at—</b>	
Minnesota State Fair, St. Paul, 1872. p. 347.....	A27.9:10
Philadelphia, Pa., July 4, 1875, at breaking ground for erection of Agricultural Hall for the Centennial. p. 440.....	A27.9:13



**Index**  
Classification no.

<b>Watts, Frederick—Continued</b>	
Agricultural implements. 1872. p. 352.....	A27.9:10
Appointment of, as Commissioner of Agriculture. 1871. p. 255.	A27.9:9
Blackleg among cattle, letter on. 1874. p. 157 .....	A27.9:12
<b>Cotton—</b>	
American, deterioration of. 1873. p. 253.....	A27.9:11
new process of utilizing. 1876. p. 400.....	A27.9:14
Cotton and sugar cane, deterioration of. 1872. p. 211.....	A27.9:10
Desiccation of fruits and vegetable. 1875. p. 507.....	A27.9:13
Epizootics among swine. 1872. p. 214 .....	A27.9:10
Grain, cross-breeding of. 1876. p. 191 .....	A27.9:14
Lime and its use. 1874. p. 449 .....	A27.9:12
Osier willow. 1873. p. 419 .....	A27.9:11
Pennsylvania barn, description of. p. 289.....	A1.1:864
Southern planting and Northern farming. 1872. p. 207 .....	A27.9:10
Wheat, cultivation and hybridizing of. 1872. p. 432.....	A27.9:10
<i>See also</i> , for reports as Commissioner of Agriculture, 1871-1876...	A1.1:
<b>Watts, Harvey Maitland:</b>	
Gulf Stream myth, report on. 1900. p. 393 .....	A29.6:28
Public and weather forecaster; read before convention of Weather Bureau officials. 1901. p. 142 .....	A29.3:31
Remarks of, at second convention of Weather Bureau officials, Milwaukee, Wis. 1901. p. 236 .....	A29.3:31
Tornado, hurricane, and cyclone, report on. 1899. p. 307.....	A29.6:27
Weather forecaster and newspaper; read before convention of Weather Bureau officials. 1901.....	A29.2:F76
same. p. 43.....	A29.3:31
<b>Watts, J. Wash. Sheep husbandry in South Carolina, Georgia, and Texas. 1877. p. 118.....</b>	
	A1.2:Sh3
<b>Watts, Ralph Levi. Onion culture. 1896.....</b>	
	A1.9:39
<b>Wave, storm, at Sausalito, California (Abbe). 1895. p. 424 .....</b>	
	A29.6:23
<b>Waves:</b>	
Lake level pressure, sudden oscillations in (Henry). 1899. p. 305.	A29.6:27
Storm, on Great Lakes and ocean (Abbe). 1895. p. 341.....	A29.6:23
<i>See also</i> Cold waves.	
<b>Wax. <i>See</i> Bees.</b>	
<b>Weasels of North America, synopsis of (Merriam). 1896 .....</b>	
	A5.5:11
<b>Weather:</b>	
August, on Pacific coast, notes on (Abbe). 1899. p. 421 .....	A29.6:27
Bulletins of daily, publication of (Scott). 1894. p. 6.....	A29.3:11 <sup>1</sup>
Cablegrams from Azores relative to, note on (Abbe). 1900. p. 253.....	A29.6:28
Changes of, report on (Richards). 1898. p. 106.....	A29.6:26
Characteristics of the, monthly notes on, July, 1891-May, 1895...	A29.6:
Climate vs., note on (Abbe). 1899. p. 62 .....	A29.6:27
<b>Cold—</b>	
blessing of (Abbe). 1899. p. 63 .....	A29.6:27
in March in Maryland, records of, 1823-94 (Acworth). p. 126.	A29.6:22
Conduct and, report on (Dexter). 1899. p. 353.....	A29.6:27
Correlation of, in distant localities, notes on (Abbe). 1900. p. 554.	A29.6:28
Dairy and, note on (Abbe). 1899. p. 475 .....	A29.6:27
Dairy cow and the. 1902. p. 28 .....	A1.9:149
Determining instruments, corrections, methods of reduction, resulting accuracy (Abbe). p. 37.....	A29.1:891 <sup>8</sup>
Distant regions, notes on (Abbe). 1895. pp. 337, 381 .....	A29.6:23
same (Abbe). 1901. p. 74 .....	A29.6:29
Effect of, on birds (Smith). 1895. p. 212 .....	A29.6:23
European and American correspondences in, 1895 (Abbe). p. 56.	A29.6:23
Hot, of August, 1900 (Henry). p. 333 .....	A29.6:28
Insects and, during season of 1899 (Chittenden). p. 51 .....	A9.6:22
same, 1900 (Chittenden). p. 63 .....	A9.6:30
Live stock industry and, report on (Brandenburg). 1900. p. 588.	A29.6:27
Malta during October, 1898 (Grout). p. 546 .....	A29.6:26
Mauritius sugar crop and, 1880-96 (Abbe). p. 412.....	A29.6:26
Monthly notes on, June, 1863, to Jan., 1872 .....	A27.9:
Monthly statement of average conditions of—	
August, 1898 (Abbe). p. 342.....	A29.6:28

# Index

Classification no.

## Weather—Continued

### Monthly statement of average conditions of—Continued

September, 1898 (Garriott). p. 395.....	A29.6:28
October, 1898 (Garriott). p. 430.....	A29.6:28
November, 1898 (Garriott). p. 483.....	A29.6:28
December, 1898 (Garriott). p. 538.....	A29.6:28
January, 1899 (Garriott). p. 21.....	A29.6:29
February, 1899 (Garriott). p. 57.....	A29.6:29
March, 1899 (Garriott). p. 117.....	A29.6:29
April, 1899 (Garriott). p. 162.....	A29.6:29
May, 1899 (Garriott). p. 208.....	A29.6:29
June, 1899 (Garriott). p. 258.....	A29.6:29
July, 1899 (Garriott). p. 307.....	A29.6:29

*See also* Weather of the month.

### Moon and, note on, relation of—

1891 (Meech). p. 372.....	A29.6:29
1898 (Abbe). p. 569.....	A29.6:26
1901 (Abbe). pp. 121, 374.....	A29.6:29

### Notes on—

1895. p. 554.....	A1.10:895
1896. p. 600.....	A1.10:896
1897. p. 689.....	A1.10:897

Operations of, simultaneous, charting. 1902. p. 369.....	A29.6:30
Records of, old, note on (Abbe). 1897. p. 398.....	A29.6:25
Report of, 1897 (Henry). p. 261.....	A29.1:898
Signs and, note on (Kimball). 1901. p. 508.....	A29.6:29
Study of sky polarization with reference to (Schultz). 1902. p. 28.....	A29.3:31

### Sun spots and—

connection between (Bigelow). 1895. p. 91.....	A29.6:23
report on (Kimball). 1901. p. 248.....	A29.6:29
Topic of conversation (Brendle). 1899. p. 160.....	A29.3:24
Train loads, fixed by. 1902. p. 444.....	A29.6:30
Transatlantic, note on (Abbe). 1900. p. 554.....	A29.6:28
Unseasonable in United States (Garriott). 1902. p. 301.....	A29.6:30
<i>See also</i> Barometer — Meteorology — Summer — Warm wave — Winter.	

## Weather and crop conditions:

1891. (Dunwoody). p. 586.....	A1.1:891
same, p. 586.....	A29.1:891 <sup>2</sup>
1892. p. 578.....	A1.1:892
same, p. 578.....	A29.1:892
1893. p. 113.....	A1.1:893
same, p. 113.....	A29.1:893 <sup>1</sup>
1894. (Dunwoody). p. 529.....	A1.10:894
1898. p. 627.....	A1.10:898
1899. p. 720.....	A1.10:899
1900. p. 696.....	A1.10:900
1901. p. 641.....	A1.10:901

## Weather and its effect on the farm, Jan., 1864. No. 1. p. 39.....

## Weather Bureau:

Almanacs and, notes on (Abbe). 1898. p. 21.....	A29.6:26
Apparatus for carrying on original scientific investigation under certain conditions, advisability of supplying employees with (Fulton). 1902. p. 22.....	A29.3:31
Benefits of, to western Nebraska (Piercy). 1899. p. 144.....	A29.3:24
Civil-service examinations for (Abbe). 1898. p. 63.....	A29.6:26
Climate and crop and storm warning services of, value of, to industries of Cuba and other islands of West Indies (Hayes). 1902. p. 58.....	A29.3:31
same, to Porto Rico (Noyes). 1902. p. 60.....	A29.3:31
Climate and crop service of, how many climate and crop correspondents are required to meet fully the needs of? (Allen). 1902. p. 195.....	A29.3:31
Commerce on Great Lakes and, note on (Abbe). 1900. p. 17.....	A29.6:28
Cooperation of, with agricultural experiment stations, report of committee on (Harris). 1893. p. 106.....	A10.3:16
Expenditures of Signal Service and, statements of.....	A29.2:Si2

**Weather Bureau—Continued**

Higher meteorology in (Bigelow). 1902. p. 19.....	A29.3:31
History of its work, etc. 1901.....	A29.2:W37 <sup>1</sup>
How it disseminates forecasts and warnings (Calvert). 1896. p. xxii.....	A29.1:896
Ice business and, note on (Abbe). 1899. p. 63.....	A29.6:27
International cloud work of (Bigelow). 1899. p. 404.....	A29.6:27
International courtesy of (Abbe). 1899. p. 160.....	A29.6:27
Libraries and, notes on (Abbe). 1898. p. 551.....	A29.6:26
Library of—	
monthly additions to—	
Apr.—Nov., 1897 (Smith).....	A29.6:25
Dec., 1897—March, 1898 (Phillips).....	A29.6:
utility of (Abbe). 1899. p. 63.....	A29.6:27
Night forecasts, is it advisable to distribute by rural free delivery? (Blystone). 1902. p. 191.....	A29.3:31
Observers—	
stations of instruction for newly appointed, should not certain important weather bureau stations be designated? (Smith). 1899. p. 105.....	A29.3:24
suggestions to (Abbe). 1897. p. 55.....	A29.6:25
Officials of—	
as instructors, notes on—	
1900 (Abbe). p. 336.....	A29.6:28
1901 (Abbe). pp. 72, 120, 174, 219, 318, 377.....	A29.6:29
1901 (Kimball). pp. 424, 458, 566.....	A29.6:29
1902 (Kimball). pp. 38, 130.....	A29.6:30
as instructors in meteorology, note on (Abbe)—	
1900. p. 446.....	A29.6:28
1902. pp. 450, 487.....	A29.6:30
as university lecturers, notes on (Abbe)—	
1899. pp. 256, 363, 420.....	A29.6:27
1900. p. 114.....	A29.6:28
duties and qualifications (Pague). 1899. p. 170.....	A29.3:24
lectures and instruction by, notes on (Abbe). 1901. p. 25....	A29.6:29
Pan-American Exposition, exhibit of (Maring). 1901. p. 259....	A29.6:29
Paris Exposition, exhibit of, notes on (Abbe). 1900. p. 445....	A29.6:28
Promotion for merit in (Abbe). 1898. p. 64.....	A29.6:26
Public and, relations between (Walz). 1899. p. 12.....	A29.3:24
same (Salisbury). 1899. p. 14.....	A29.3:24
Publications of—	
for school use (Abbe). 1900. p. 558.....	A29.6:28
notes on, 1891–1901 (Kimball). p. 216.....	A29.6:29
Records of, legal value of, note on (Abbe). 1900. p. 115.....	A29.6:28
Relation of, to Department of Agriculture (Calvert). 1899. p. 54....	A29.3:24
Relation of meteorological work of agricultural experiment stations and agricultural colleges to (Harrington). 1892. p. 42....	A10.3:7
Report of (Moore). 1901. p. 595.....	A29.6:29
Service in, career offered to young men (Nunn). 1902. p. 78....	A29.3:31
Signals of—	
report of committee on. 1892. p. 34.....	A29.3:7
report on. 1898. p. 668.....	A1.10:898
suggestions for improvement of—	
(Abbe). 1892. p. 35.....	A29.3:7
(Barus). 1892. p. 44.....	A29.3:7
(Dunwoody). 1892. p. 35.....	A29.3:7
(Garriott). 1892. p. 48.....	A29.3:7
(Hazen). 1892. p. 39.....	A29.3:7
(Marvin). 1892. p. 41.....	A29.3:7
(Purssell). 1892. p. 47.....	A29.3:7
(Russell). 1892. p. 42.....	A29.3:7
(Whitehead). 1892. p. 46.....	A29.3:7
State sections of, notes from reports (Abbe). 1898. pp. 20, 65, 114.....	A29.6:26
Universities and colleges and, notes on (Abbe)—	
1898. p. 568.....	A29.6:26
1900. p. 165.....	A29.6:28

# Index

Classification no.

## Weather Bureau—Continued

### Voluntary observers—

examination of monthly meteorological reports of (Bauer).

1902. p. 172

instructions for

report on. 1895. p. 555

same. 1896. p. 600

should not thermographs be furnished to, records to be kept at

section centers? (Wollaber). 1902. p. 219

West India service, monthly reports of (Stockman). 1899. p. 194.

same (Kimball). 1902. p. 30

### Work of—

extension of (Garriott). 1900. p. 242

for farmer (Moore). 1897. p. 59

importance of static electricity in (Beals). 1896. p. 39

in connection with rivers of U. S. 1896

new (Moore). 1898. p. 81

possible advances in (Sage). 1895. p. 463

practical side of, note on (Abbe). 1898. p. 551

present condition of, propositions for its improvement (Beb-

ber). 1894. p. 34

telegraph and (Robinson). 1902. p. 145

*See also* Alaska—Atlantic City—Climate and crop service—Do-  
minica—Haiti—Jamaica—Japan—Klondike—New York  
City—Philippine Islands—State weather services—Weather  
Bureau stations.

## Weather Bureau instruments:

Care and use of (Marvin)

Description of (Marvin)—

1891. p. 19

1893. p. 17

1894. p. 14

1896. p. 8

Location and elevation of, at Mount Tamalpais, Cal. (Hammon).

1898. p. 494

Obtaining and transcribing records from, instructions for. 1892.

Shelter for—

(Hazen). 1893. p. 29

(Pague). 1893. p. 27

(Smith). 1893. p. 25

*See also* Anemometer—Barometer—Brontometer—Magnetic in-  
struments—Marvin's weighing rain and snow gauge—Nepho-  
scope—Pyrheliometer—Thermographs—Thermometers—  
Wind barometer table—Wind vanes.

## Weather Bureau kite:

Observations in 1898, preliminary results of (Abbe). p. 413.

Report on (Marvin). 1896. p. 418

## Weather Bureau officials:

First convention of, Omaha, Nebr., Oct. 13, 14, 1898, notes on

(Abbe). 1898. pp. 213, 412

same, proceedings of, edited by James Berry. 1899

Second convention of, Milwaukee, Wis., Aug. 27-29, 1901, notes

on (Abbe). 1901. pp. 25, 317

same, proceedings of, edited by James Berry and W. F. R.

Phillips. 1902

## Weather Bureau signals. *See* Storm signals—Weather signals.

## Weather Bureau stations:

Is exposure at, satisfactory for all instruments? (Outram). 1902.

p. 216

Libraries at, notes on (Abbe). 1901. p. 25

Personnel of force of (Carroll). 1902. p. 35

Should compensation be allowed persons, not in employ of Bureau,

while learning station duties to enable them to properly

perform such duties in cases of emergency? (Cuthbertson).

1899. p. 127

same (Franklin). 1899. p. 127

**Weather Bureau stations—Continued**

Work of, under existing conditions of, is it practicable to require assistants to pursue a systematic course of meteorological study? 1902. p. 82.....	A29.3:31
<i>See also</i> Tamalpais, Mount—Turks Island.	
Weather charts, explanation of. 1892.....	A29.2:W37 <sup>2</sup>
Weather codes.....	A29.2:W37 <sup>2</sup>
Weather crop bulletin of southern California, history of (Franklin). 1896. p. 46.....	A29.3:18
Weather forecast cards by rural delivery, note on (Abbe). 1900. p. 162.....	A29.6:28
Weather forecast stations, voluntary:	
Object and collateral functions (Mitchell). 1899. p. 140.....	A29.3:24
River and cotton belt, establishment and inspection of (Marbury). 1899. p. 150.....	A29.3:24
Weather forecaster and newspaper; read before convention of Weather Bureau officials, 1901 (Watts).....	A29.2:F76
Same. p. 43.....	A29.3:31
Weather forecaster and public; read before convention of Weather Bureau officials, 1901 (Watts) p. 142.....	A29.3:31
Weather forecasts:	
Amplification of (Henry). 1900. p. 107.....	A1.10:900
Best calculated to aid maritime interests of Great Lakes; method of reaching those interested (Conger). 1899. p. 20.....	A29.3:24
same (Cox). 1899. p. 19.....	A29.3:24
Commercial importance of, notes on (Abbe). 1900. p. 550.....	A29.6:28
Distribution of—	
by mail (Lyons). 1899. p. 161.....	A29.3:24
methods of saving time in (Blythe). 1902. p. 203.....	A29.3:31
should wording of forecasts be confined to vocabulary of present logotype outfit? is it advisable to extend vocabulary of present logotype outfit? (Chaffee). 1899. p. 48.	A29.3:24
same (Chappel). 1899. p. 49.....	A29.3:24
For the farmer (Reed). 1900. p. 287.....	A29.6:28
General and local, relation between (Walz). 1902. p. 117.....	A29.3:31
Historical, practical, and theoretical facts. 1899.....	A29.3:25
Hongkong (Doberck). 1899. p. 98.....	A29.6:27
Improving, double observation as a means of (Denson). 1902. p. 153.....	A29.3:31
Long-range—	
can they be made with any degree of accuracy or profit? (Crane). 1899. p. 157.....	A29.3:24
can they be made with sufficient precision to be of general utility?—	
(Connor). 1899. p. 44.....	A29.3:24
(Hazen). 1899. p. 43.....	A29.3:24
(Pague). 1899. p. 46.....	A29.3:24
Canada (Gun). 1899. p. 149.....	A29.6:27
Oregon (Abbe). 1895. p. 423.....	A29.6:23
physical basis of (Abbe). 1901. p. 551.....	A29.6:29
possibilities of (Abbe). 1894. p. 330.....	A29.6:22
present state of, notes on (Abbe). 1899. p. 156.....	A29.6:27
Methods employed in distribution of (Berry). 1901. p. 14.....	A29.6:29
Mexico, notes on (Abbe). 1900. p. 540.....	A29.6:28
Missouri (Frankenfield). 1895. p. 292.....	A29.6:23
Monthly, notes on—	
Oct., 1897–Apr., 1898 (Dunwoody).....	A29.6:
May, 1898 (Morrill). p. 195.....	A29.6:26
June–Aug., 1898 (Bigelow).....	A29.6:26
Sept., 1898, to Oct., 1902 (Garriott).....	A29.6:
Public and (Boyer). 1902. p. 151.....	A29.3:31
Should temperature be verified by maximum and minimum readings? (Lyons). 1902. p. 167.....	A29.3:31
Stamping, on mail matter, report of committee appointed to investigate subject of (Chaffee). 1896. p. 51.....	A29.3:18
Storm tracks, storms, and (Bigelow). 1897.....	A29.3:20



# Index

	Classification no.
Weather forecasts—Continued	
Storm warnings and, how Weather Bureau disseminates (Calvert). 1896. p. xxii .....	A29.1:896
Street-car notices (Conger). 1902. p. 206 .....	A29.3:31
Value of (Dunwoody). 1894. p. 121 .....	A1.10:894
same (Cline). 1895. p. 293 .....	A29.6:23
Value of dew point in, under certain conditions (Wood). 1902. p. 152.....	A29.3:31
Verification of (Marbury). 1902. p. 156.....	A29.3:31
Weather types and, on north Pacific slope (Pague and Blandford). 1897.....	A29.2:P11
What classes are most benefited by? are they just what are needed? are they properly disseminated and utilized? (Sage). 1899. p. 40 .....	A29.3:24
same (Bate). 1899. p. 41.....	A29.3:24
Would not postal card prove satisfactory substitute for map? (Calvert). 1899. p. 100.....	A29.3:24
same (Townsend). 1899. p. 102.....	A29.3:24
<i>See also</i> Semaquir.	
Weather guide, Australian, notes on (Abbe). 1898. p. 365.....	A29.6:26
Weather map:	
Daily—	
development of (Calvert). 1899. p. 144.....	A29.3:24
for Mexico (Abbe). 1899. p. 107.....	A29.6:27
publication of (Scott). 1894. p. 6 .....	A29.3:11 <sup>1</sup>
wall map, 52 × 56 in. Dec. 13-16, 1893. 1894 .....	A29.2:W37 <sup>r</sup>
Explanation of (Moore) .....	A29.2:W37 <sup>e</sup>
History of (Harrington). 1895. p. 327.....	A29.3:11 <sup>1</sup>
How to make synopsis instructive to public (Chaffee). 1902. p. 137.....	A29.3:31
Is it appreciated and understood by the masses? would not postal card weather forecast prove satisfactory substitute for map? (Calvert). 1899. p. 100.....	A29.3:24
same (Townsend). 1899. p. 102.....	A29.3:24
Pan-American Exposition .....	A29.2:P19
Proposed classification and index of, as an aid in weather forecasting (Brown). 1901. p. 547 .....	A29.6:29
Table of.....	A29.18:
Utility of. 1899. p. 107.....	A29.6:27
Weather observers:	
Civil-service examinations for, in United States Weather Bureau (Kimball). 1898. p. 548.....	A29.6:26
Early individual, in United States (Henry). 1895. p. 291.....	A29.3:11 <sup>1</sup>
Instructions for. 1895 .....	A29.12:Ob7
Voluntary—	
how best to secure and retain services of (Greenewald). 1896. p. 42.....	A29.3:18
should not a book be provided for keeping record of issue of instruments and flags to? (Allen). 1899. p. 125 .....	A29.3:24
same (Bronson). 1899. p. 126 .....	A29.3:24
What a weather observer should know (Taylor). 1898. p. 543..	A29.6:26
Weather of the month:	
Jan., 1898-June, 1900 (Henry).....	A29.6:
July, 1900 (Day) .....	A29.6:28
Aug., 1900-June, 1901 (Henry) .....	A29.6:
July, 1901 (Day) .....	A29.6:29
Aug., 1901-Apr., 1902 (Henry) .....	A29.6:
May-Oct., 1902 (Stockman) .....	A29.6:30
<i>See also</i> , Weather, monthly notes and statements.	
Weather predictions:	
Best method of testing (Köppen). 1894. p. 29 .....	A29.3:11 <sup>1</sup>
Experiments in (Eddy). 1899. p. 96.....	A29.6:27
History of (Abbe). 1899. p. 64 .....	A29.6:27
Smithsonian, notes on (Abbe). 1898. p. 263.....	A29.6:26
Utilization of cloud observations in local and general (McAdie). 1894. p. 21 .....	A29.3:11 <sup>1</sup>
Weather prophet, every man his own (Hopkins). 1899. p. 293....	A29.6:27



	<b>Index</b>
	<b>Classification no.</b>
Weather proverbs, unreliable popular, notes on (Abbe). 1896. p. 374.	A29.6:24
Weather-recording instruments, instructions for transcribing records from. 1892 .....	A29.11:A
Weather review, monthly .....	A29.6
Weather sign, local, note on (Abbe). 1900. p. 249 .....	A29.6:28
Weather signals:	
International symbols recommended for use by meteorological congress, Munich, 1892 (Harrington). Jan. 1, 1894.....	A29.2:In8
Railway. 1883. No. 64. p. 18 .....	A27.9:21
Searchlight for (Calvert). 1898. p. 58 .....	A29.6:26
<i>See also</i> Storm signals.	
Weather symbols on rural free-delivery wagons (Pindell). 1902. p. 208 .....	A29.3:31
Weather telegraphy:	
Early history of (Abbe). 1895. p. 215.....	A29.6:23
History of, note on (Abbe). 1899. p. 17 .....	A29.6:27
Weather types:	
Classified, report on (Garriott). 1901. p. 548.....	A29.6:29
same (Kimball). 1901. p. 562 .....	A29.6:29
Corresponding, facilities for systematic study of (Brandenburg). 1902. p. 136 .....	A29.3:31
Facilities for systematic study of corresponding (Brandenburg). 1901. p. 546 .....	A29.6:29
Havre, Mont. (Ling). 1898. p. 410.....	A29.6:26
North Pacific slope (Pague). 1895. p. 417.....	A29.6:23
Weaver, Willis. Coffee, culture and habits of. p. 31.....	A1.1:879
Web-worm. <i>See</i> Corn-root web-worm — Juniper web-worm — Parsnip web-worm — Privet web-worm — Sugar-beet web-worm.	
Webb, Wesley:	
Delaware, farmers' institute work accomplished in. 1902. p. 17.	A10.3:120
Sheep husbandry in Delaware. 1883. p. 172 .....	A1.7:2
Webber, B. C. Gales, January, from Great Lakes to maritime provinces. 1902. p. 11.....	A29.6:30
Webber, Herbert John:	
Fertilization of soil as affecting orange in health and disease. 1894. p. 193 .....	A1.10:894
Freezes, two, of 1894-95 in Florida, and what they teach. p. 159..	A1.10:895
Fungous parasite on <i>Aleyrodes citri</i> R. & H., preliminary notice of. 1891. p. 363.....	A28.5:7
Orange and other citrus fruits, methods of propagating. 1896. p. 471 .....	A1.10:896
Pineapple industry in United States. 1895. p. 269 .....	A1.10:895
Plant varieties, influence of environment in origination of. 1896. p. 89 .....	A1.10:896
Plants, improvement of, by selection. 1898. p. 355.....	A1.10:898
Sooty mold of orange—	
and its treatment. 1897 .....	A28.3:13
treatment of. 1895 .....	A28.4:15
Water hyacinth and its relation to navigation in Florida. 1897..	A6.3:18
Xenia, or immediate effect of pollen in maize. 1900 .....	A28.3:22
Zamia, spermatogenesis and fecundation of. 1901 .....	A19.3:2
<i>See also</i> , as joint author, Swingle, Walter Tennyson.	
Webber, Herbert John, and Bessey, Ernst A. Plant breeding, progress of, in United States. 1899. p. 465 .....	A1.10:899
Webber, Herbert John, and Orton, W. A. Cowpeas resistant to root knot. 1902. p. 22.....	A19.3:17
Weber, Henry Adam. Baking powders as found in market, composition of. 1889. p. 576 .....	A7.3:13 <sup>6</sup>
<i>See also</i> , as collaborator, Wiley, Harvey Washington.	
Weber, Henry Adam, and McPherson, William. Glucose, commercial, cane sugar in presence of, report on determination of. 1894. p. 126 .....	A7.3:43
Weber County, Utah, soil survey in (Gardner and Jensen). p. 207..	A26.5:900 <sup>1</sup>
Webster, C. E. Silkworm, Japanese oak-feeding, notes on cultivation of. 1889. p. 273 .....	A9.7:1

# Index

	Classification no.
Webster, Francis M.:	
Arkansas and Texas, injurious and other insects of, observations on. 1891. p. 451 .....	A9.7:3
Army worm notes. 1890. p. 112 .....	A9.7:3
Arsenites, spraying with, vs. bees—	
1892. v. 5, p. 121 .....	A9.7:5
1894. v. 7, p. 132 .....	A9.7:7
Australia and Tasmania, injurious and beneficial insects of, notes on some. 1889. p. 361 .....	A9.7:1
Bryobia, species of, infesting dwellings, notes on. 1889. p. 277.	A9.7:1
Buffalo gnats, or simulium—	
infesting country adjacent to Mississippi River. p. 456.....	A4.1:887-8
report on. 1887. p. 29.....	A9.3:14
Cereal crops, insects affecting, report on some of. 1890. p. 63..	A9.3:23
Chinch bug—	
interesting outbreak of, in northern Ohio. 1899. p. 55 ....	A9.6:20
in Ohio, outbreak of, three years' study of. 1896. p. 18.....	A9.6:6
its probable origin and diffusion, its habits and development, natural checks and remedial and preventive measures, with mention of habits of allied European species. 1898 .....	A9.6:15
Cimbex, American, adults of, injuring willow and cottonwood in Nebraska. 1890. p. 228.....	A9.7:2
Clover hay-worm, <i>Asopia costalis</i> , some studies of. 1891. p. 121.	A9.7:4
Coccinellidæ in conservatory, experiment with. 1890 p. 363...	A9.7:2
Corn, insects affecting, notes upon. 1890. p. 159.....	A9.7:3
Corn bill-bugs, life history of one of. 1889. p. 132 .....	A9.7:2
Corn insects, observations on, in 1887. p. 147 .....	A1.1:887
Crane-fly, larvæ of, destroying young wheat in Indiana. 1890. p. 12 .....	A9.7:3
Curculionidæ, breeding and other habits of some species of, especially of genus <i>Tyloderma</i> , notes on. 1889. p. 109 .....	A9.7:2
Eburia quadrimaculata, longevity of early stages of, notes upon. 1889. p. 339 .....	A9.7:1
Entomology, applied, present and future of, in America. 1897. p. 5 .....	A9.6:9
Garden insects, notes on. 1890. p. 149.....	A9.7:3
Grain toxoptera, notes on. 1892. p. 245 .....	A9.7:4
Grains—	
American cereal, insect foes of, with measures for their prevention or destruction. 1893. p. 146.....	A9.7:6
insects affecting, observations upon. 1890. p. 42 .....	A9.3:22
Grains and grasses, small, insects affecting. p. 573.....	A1.1:886
Grasses, insects, which affect upper portion of stems of, notes on some. 1889. p. 372 .....	A9.7:1
Hemipterous insects, record of some experiments relating to effect of puncture of some, upon shrubs, fruits, and grains, 1886. 1887. p. 54 .....	A9.3:13
Insectary and office methods in use in entomological department of Ohio Agricultural Experiment Station, report on. 1899. p. 46 .....	A9.6:20
Insects—	
destructive, importation and repression of. 1895. p. 79.....	A9.6:2
injurious, early published references to some of our. 1892. pp. 262, 323 .....	A9.7:4
Joint-worm attack, apparent, some features of. 1892. p. 89.....	A9.7:5
Limax campestris, food of, further notes on. 1892. p. 128 .....	A9.7:5
Necrophagous diptera, notes on species of. 1890. p. 356.....	A9.7:2
Ohio—	
insects in, notes on. 1891. p. 63.....	A9.3:26
insects of year in, as reported to Association of Economic Entomologists—	
1893. p. 186 .....	A9.7:6
1894. p. 202 .....	A9.7:7
1895. p. 84 .....	A9.6:2
1896. p. 66 .....	A9.6:6
1900. p. 84 .....	A9.6:26

**Webster, Francis M.—Continued**

Plum curculio, experiments in rearing, from plums and other fruits—

- |  |          |
|--|----------|
| 1888. p. 78 .....  | A1.1:888 |
| same. p. 78 .....  | A9.1:888 |
| 1890. p. 305 .....   | A9.7:2   |
| Strawberry-leaf flea-beetle in Indiana. 1891. p. 317 ..... | A9.7:3   |
| Wheat, fall, insects affecting. p. 383 .....               | A1.1:884 |
| same. p. 311 .....   | A1.1:885 |

Webster, Francis M., and Burgess, Albert F. Coccidæ of Ohio, partial list of. 1902. p. 109 .....

A9.6:37

Webster, Francis M., and Mally, C. W.:

Ohio, insects of year in, as reported to Association of Economic Entomologists—

- |                   |         |
|-------------------|---------|
| 1897. p. 40 ..... | A9.6:9  |
| 1898. p. 98 ..... | A9.6:17 |
| 1899. p. 68 ..... | A9.6:20 |

Webster, Francis M., and Newell, Wilman. Ohio, insects of year in, as reported to Association of Economic Entomologists. 1901. p. 84 .....

A9.6:21

Webster, W. Prentiss. Crops in Germany. 1870. p. 283 .....

A27.9:8

Wedderburn, Alexander John:

Food adulteration—

- |   |         |
|---|---------|
| popular treatise on extent and character of. 1890 .....   | A7.3:25 |
| special report on extent and character of, including State and other laws relating to foods and beverages. 1892 ..... | A7.3:32 |
| Food and drug adulteration, extent and character of. 1894 .....   | A7.3:41 |
| Pharmacy and drug laws of States and Territories, compilation of. 1894 .....  | A7.3:42 |

Weed, Clarence Moores:

Aphididæ, certain little known, fifth contribution to a knowledge of. 1891. p. 285 .....

A9.7:3

Caccecia cerasivorana, oviposition of. 1900. p. 33 .....

A9.6:26

Egg parasite of *Vanessa antiopa*, oviposition of. 1900. p. 32 .....

A9.6:26

Kerosene knapsack sprayer, modification of. 1895. p. 28 .....

A9.6:2

Pimpla inquisitor, life history of. 1891. p. 275 .....

A9.7:3

Potato rot, injuries of, experiment in preventing. 1889. p. 158 .....

A28.5:5

Tent caterpillars, notes on. 1898. p. 76 .....

A9.6:17

Weed, Clarence Moores, and Fiske, William F.:

Pimpla conquisitor, relations of, to *Clisiocampa americana*. 1900. p. 33 .....

A9.6:26

Spruce bark-beetles, notes on. 1898. p. 67 .....

A9.6:17

Weed, Howard Evarts:

Carbon bisulphide for crayfish. 1895. p. 98 .....

A9.6:2

Insects injurious to cotton, remedies for. 1893. p. 167 .....

A9.7:6

Knapsack kerosene attachment, some experiments with. 1895. p. 26 .....

A9.6:2

Mississippi, entomological work of season in. 1891. p. 34 .....

A9.7:4

Mississippi Station, insects from, notes on. 1892. p. 110 .....

A9.7:5

Mosquitoes, some experience with. 1894. p. 212 .....

A9.7:7

Weeds:

Abstracts of reports of agricultural experiment stations on, 1889–1902 .....

A10.6:

American agriculture (Darlington). p. 509 .....

A1.1:885

Birds as destroyers of (Judd). 1898. p. 221 .....

A1.10:898

Cities and towns (Dewey). 1898. p. 193 .....

A1.10:898

Destruction of, by means of chemicals (Evans). 1901. p. 19 .....

A1.9:124

Legislation against (Dewey). 1896 .....

A6.3:17

Migration of (Dewey). 1896. p. 263 .....

A1.10:896

Noxious, report on (Coville)—

1889. p. 382 .....	A1.1:889
--------------------	----------

same. p. 382 .....	A6.1:889
--------------------	----------

1890. p. 388 .....	A1.1:890
--------------------	----------

same. p. 388 .....	A6.1:890
--------------------	----------

One hundred, table of. 1894. p. 581 .....

A1.10:894

Three new, of mustard family (Dewey). 1897 .....

A6.4:10

Twenty-five most harmful. 1897. p. 641 .....

A1.10:897

# Index

	Classification no.
<b>Weeds—Continued</b>	
Two, new to United States (Rose). p. 355 .....	A1.1:891
same. p. 355.....	A6.1:891
Two hundred, how to know them and how to kill them. 1895. p. 592 .....	A1.10:895
<i>See also</i> Abutilon avicennæ (Indian mallow) — Chess — Cockle- bur — Florida beggar weed — Garlic — Grasses and weeds — Mustard — Noxious weeds — Russian thistle — Seaweed.	
Weeds and how to kill them (Dewey). 1895 .....	A1.9:28
Weevils. <i>See</i> Apple tree — Bean — Fly — Mexican cotton-boll — Palm and palmetto — Pea — Potato-bud — Potato stalk — Straw- berry — Tobacco stalk.	
<b>Weights and measures:</b>	
Decimal system of (Johnson). 1864. No. 6. p. 20 .....	A27.9:2
Explanation of systems of various States. p. 219.....	A1.1:871
Notes on—	
1864. p. 19 .....	A27.9:2
1865. No. 10. p. 4 .....	A27.9:3
1866. p. 27 .....	A27.9:4
Porto Rico, notes on (Abbe). 1898. p. 567.....	A29.6:26
<i>See also</i> Metric system.	
Weight of an animal, what is the live? (Patterson). 1893. p. 150 ...	A10.3:16
Weiske, H. Milch cows, food of, do volatile acids in, occur in milk? 1890. p. 141 .....	A7.3:24
Welch, A. S. Organization and management of seven agricultural schools in Germany, Belgium, and England. 1885.....	A1.8:36
Well waters and drainage, lecture on (Warrington). 1892. p. 95 ...	A10.3:8
Wellman, Walter. Horse trade, American, of Great Britain. 1897. p. 45.....	A1.2:H78
Wellman's first polar expedition, 1894, notes on (Abbe). p. 312 ...	A29.6:26
Wellman's second polar expedition:	
Made in neighborhood of Franz Joseph Land, 1898-99, auroral observations on (Baldwin). p. 107 .....	A29.6:29
Meteorology of, notes on (Abbe). 1898. p. 167.....	A29.6:26
Notes on (Abbe). 1898. p. 414.....	A29.6:26
same, p. 366 .....	A29.6:27
<b>Wells:</b>	
Freezing, notes on (Kimball). 1901. p. 509 .....	A29.6:29
Frozen, as meteorological phenomena (Kimball). 1901. p. 366. ....	A29.6:29
Storms and, note on (Abbe). 1900. p. 293.....	A29.6:28
Water in, temperature of, notes on (Kimball). 1901. p. 510... ..	A29.6:29
Wentworth, C. C. Bridges, country road. 1895. p. 48 .....	A22.3:11
Werner-Smith method of determination of fat in milk (Stokes). 1890. p. 158 .....	A7.3:24
West, Charles E. Atmospheric electricity, early experiments in. 1896. p. 333 .....	A29.6:24
<b>West, Max:</b>	
Employment agencies for use of farmers, list of. 1900 .....	A27.4:13
Public domain of United States. 1898. p. 325 .....	A1.10:898
West, Robert A. Aquaria, fresh and salt water. p. 446.....	A1.1:864
<b>West:</b>	
Agricultural condition of. 1871. p. 329 .....	A27.9:9
Cattle interests of (Fullinwider). p. 271.....	A4.1:884
Central, animal husbandry in (Morrow). p. 62 .....	A1.8:22
Cooperative grass stations in (McLaren). p. 344.....	A1.1:891
same, p. 344 .....	A6.1:891
Far, native fruits of (Thompson). p. 207.....	A1.1:865
Grape growing at (Thompson). p. 115.....	A1.1:866
Hogs and pork packing in (Emery). p. 198.....	A1.1:863
Middle, forest extension of (Hall). 1900. p. 145.....	A1.10:900
Semiarid, forage plants for (Georgeson). 1893. p. 145.....	A10.3:16
Sheep husbandry in (Boardman). p. 286 .....	A1.1:862
<i>See also</i> Western States and Territories.	
West Berkeley, Cal., local squall at, Dec. 11, 1894 (Abbe). p. 509 ..	A29.6:22
West Indian rufous scale, report of (Cockerell). 1892. p. 380.....	A9.7:4
<b>West Indies:</b>	
Barometry of (Bigelow). 1902 .....	A29.1:901 <sup>2</sup>

# Index

Classification no.

## West Indies—Continued

Climate of (Hall). 1896. p. 589 .....	A29.3:11 <sup>1</sup>
Cotton crop and its enemies in, consular reports on. 1885. App., p. 59 .....	A8.1:4
Cyclones of, wind direction at different altitudes around, some observations of (Boyer). 1892. p. 50 .....	A29.6:20
French, sugar making in. 1873. p. 25 .....	A27.9:11
Hurricane service (Moore). 1899. p. 56 .....	A29.3:24
Hurricanes of—	
report on (Garriott). 1900.....	A29.5:H
September, 1896, notes concerning (Henry). p. 368 .....	A29.6:24
September 1-12, 1900. p. 371.....	A29.6:28
Industries of Cuba and other islands of, value of climate and crop and storm-warning services of Weather Bureau to (Hayes). 1902. p. 58 .....	A29.3:31
Monthly weather charts for, notes on (Abbe). 1899. p. 111....	A29.6:27
Relation of forests and rainfall (Hubbard). 1873. p. 117.....	A27.9:11
Storms of, relative intensity of (Hazen). 1894. p. 333.....	A29.6:21
Telegraph service with (Robinson). 1898. p. 410.....	A29.6:26
Weather Bureau service in—	
monthly reports of (Stockman). 1899. p. 194 .....	A29.6:27
notes on (Garriott). 1898. p. 303.....	A29.6:26
same (Kimball). 1902. p. 30.....	A29.6:30
Yams in (Fairchild). 1899.....	A6.4:21
<i>See also</i> Jamaica—Martinique—St. Kitts—St. Thomas—Trinidad.	
West Newbury, Mass., farmers' club. 1870. p. 228 .....	A27.9:8
<b>West Virginia:</b>	
Coal-oil in (Shattuck). p. 525 .....	A 1.1:863
Entomological discoveries and observations of year in (Hopkins). 1894. p. 145 .....	A9.7:7
Farm resources and products of. 1868. p. 132 .....	A27.9:6
Farmers' institute work accomplished in (Thompson). 1902. p. 30 .....	A10.3:120
Forest condition and lumber and wood trade of (Hough). 1884. p. 348 .....	A13.5:4
Insects in, some notes on (Hopkins). 1898. p. 44 .....	A9.6:17
Observations in, on farm, garden, and fruit insects, some notes on (Hopkins). 1896. p. 71 .....	A9.6:6
Resources of, etc., brief history of (Dodge). p. 42.....	A1.1:863
Road improvement in, extract from governor's message (Atkinson). p. 14 .....	A22.4:33
West Virginia braconidæ, some bred (Hopkins). 1892. p. 256....	A9.7:4
Western cricket, outbreaks of, in Idaho (Milliken). 1893. p. 17...	A9.7:6
<i>See also</i> Cricket.	
Western fungi, new (Ellis and Galloway). 1889. p. 65.....	A28.5:5
Western hemlock (Allen). 1902 .....	A13.3:33
<b>Western plains:</b>	
Sheep of, tape-worm disease of (Curtice). p. 167.....	A4.1:887-8
Tree culture on (Thomson). 1891. p. 45.....	A13.3:5
Tree planting in (Keffer). 1895. p. 341.....	A1.10:895
<b>Western States and Territories:</b>	
Condition of forests, timber culture, etc., in (Baker). 1884. p. 105.	A13.5:4
Farmer of, best breeds of cattle for general use of (Baker). 1883. p. 95 .....	A1.7:2
Forest condition and lumber and wood trade of, reports on (Furnas). 1884. pp. 246, 255 .....	A13.5:4
Forestry of. p. 515 .....	A1.1:878
Pork trade. 1864. No. 6. p. 32.....	A27.9:2
<i>See also</i> West—and names of States and Territories.	
Western wheat culture, ruinous. 1867. p. 321.....	A27.9:5
Westfield area, New York, soil survey (Burke and Marean). p. 75..	A26.5:901 <sup>1</sup>
Westward movement of daily barometric wave (Fassig). 1902. p. 62.	A29.3:31
Wetherell, Leander. Ice trade, history of. p. 439.....	A1.1:863
Wetherill, Charles M., chemical analysis of grapes. 1862.....	A1.8:3
<i>See also</i> , for report as Chemist, Chemistry Bureau, Agriculture Department, 1862 .....	
	A7.1:

# Index

Classification no.

## Wheat:

Algerian durum, classified list, with descriptions (Scofield). 1902.	A19.3:7
American—	
basis for improvement of (Carleton). 1900.....	A28.3:24
composition of, investigation of (Richardson)—	
[1st report.] 1883.....	A7.3:1
same, errata. 1884. p. 98.....	A7.3:4
2d report. 1884.....	A7.3:4
recent use of, in Austria-Hungary.....	A12.4:19
Australian statistics, 1883-4. No. 11. p. 38.....	A27.9:22
British supply of—	
1868. p. 459.....	A27.9:6
1869. pp. 147, 240.....	A27.9:7
1870-71. p. 324.....	A27.9:9
1872-86. p. 641.....	A27.9:25
Carbohydrates of (Stone). 1896.....	A10.3:34
Chicago and Milwaukee, 1862-66. p. 431.....	A27.9:4
Consumption of, per capita in United States. 1895. p. 74.....	A27.9:33
Course of production and exportation in United States, Canada, Argentina, Uruguay, Russia, and British India, 1880-96.....	A12.4:10
Crop, condition, monthly notes on.....	A27.9:
Crop statistics, annual.....	A27.1:
Cultivation and hybridizing of (Watts). 1872. p. 432.....	A27.9:10
Dakota. 1887. p. 631.....	A27.9:25
Deterioration of. 1871. p. 465.....	A27.9:9
Distribution and consumption of—	
1883. No. 57.....	A27.9:21
1884.....	A27.9:22
1885. p. 22.....	A27.9:23
1893. No. 102 A.....	A27.9:31
1895. p. 59.....	A27.9:32
1895, for 25 years. p. 88.....	A27.9:32
Drill and broadcast sowing of. 1864. No. 5. p. 6.....	A27.9:2
Early plowing for (May). 1900. p. 7.....	A1.9:122
English culture of. 1870. p. 286.....	A27.9:8
English imports of, 1854-63. No. 2. p. 25.....	A27.9:2
English prices of. 1895. p. 193.....	A27.9:33
European, prospects. Apr., 1883. (Moffat.) No. 58. p. 31.....	A27.9:21
Experiments of J. B. Lawes, 1863-73. p. 596.....	A27.9:11
Exportation of—	
comparative statistics of. 1891. p. 80.....	A27.9:29
to England, 1867-68. p. 325.....	A27.9:6
Exports of—	
1830-76. p. 30.....	A27.9:15
1880-90. p. 567.....	A27.9:28
Fall, insects affecting (Webster). p. 383.....	A1.1:884
same (Webster). p. 311.....	A1.1:885
Fertilization of, and other grasses (Vasey). 1873. p. 247.....	A27.9:11
Food for growing and fattening animals (Salmon). n. d.....	A4.4:2
Foreign demand for. 1873. p. 594.....	A27.9:11
Freight rates on, from New York to Liverpool. 1895. p. 553.....	A1.10:895
same, 1892-96. p. 597.....	A1.10:896
French crops, 1815-74. p. 116.....	A27.9:14
Great Britain, imports of, 1873-74. p. 45.....	A27.9:13
Great Britain and Ireland, consumption and production of. 1865. No. 7. p. 27.....	A27.9:3
Growing—	
cost of, in England. 1885. No. 23. p. 34.....	A27.9:23
New Hampshire (Bartlett). p. 96.....	A1.1:862
Northwest. 1868. p. 323.....	A27.9:6
Pacific coast region, general agricultural conditions and (Holmes). 1901.....	A27.8:20
principal insect enemies of (Marlatt). 1901.....	A1.9:132
successful, in semiarid districts (Carleton). 1900. p. 529.....	A1.10:900
Horse hoeing, experiment in. 1868. p. 90.....	A27.9:6
Hungarian exports, 1855-68. p. 148.....	A27.9:7
Improvements in culture of (Carleton). 1896. p. 489.....	A1.10:896



**Index**  
Classification no.

**Wheat—Continued**

Industry in, new, for semiarid West (Carleton). 1901 .....	A28.4:18
Influence of rye on price of (Peters). 1900. p. 167 .....	A1.10:900
Inspection of. 1889. p. 64 .....	A27.9:27
International supply, 1858-76. p. 27 .....	A27.9:15
Irish production, decrease of, 1847-62. No. 6. p. 21 .....	A27.9:1
Macaroni (Carleton). 1901 .....	A19.3:3
Minnesota crop of—	
1865. p. 12 .....	A27.9:4
1869. p. 144 .....	A27.9:7
1887. p. 631 .....	A27.9:25
Nebraska. 1867. p. 366 .....	A27.9:5
Origin and treatment (Blount). p. 559 .....	A1.1:881-2
Pennsylvania Agricultural College experiments. 1875. p. 442 ..	A27.9:11
Ports for, on Pacific coast (Holmes). 1901. p. 567 .....	A1.10:901
Premiums for growers of—	
1868. p. 364 .....	A27.9:6
1870. p. 84 .....	A27.9:8
Prices of—	
1890. p. 524 .....	A27.9:28
1865-1895. p. 82 .....	A27.9:33
Production and exportation in United States, Canada, Argentina, Uruguay, Russia, and British India, course of, 1880-96 .....	A12.4:10
Production of, in census years since 1869. 1894. p. 189 .....	A27.9:32
Products and prices of—	
1887. p. 361 .....	A27.9:25
1888. p. 525 .....	A27.9:26
Raising, expense of. 1894. p. 106 .....	A27.9:32
Receipts of, 1863-67. p. 371 .....	A27.9:5
Report on plant (Bollman). p. 65 .....	A1.1:862
Russian, British imports of, 1852-67. p. 39 .....	A27.9:6
Rusted, request for specimens of (Dabney). 1894 .....	A28.4:14
Rusts affecting, experiments in treatment of (Galloway). 1891. p. 195 .....	A28.5:7
Scarcity of. 1867. p. 208 .....	A27.9:5
Scotland, experiments. 1866. p. 386 .....	A27.9:4
Seed, for the Northwest, correspondence on. 1868. p. 285 .....	A27.9:6
Sheaf, feeding to hogs (French). p. 495 .....	A4.1:898
Sheaf and chopped, for pigs (French). p. 494 .....	A4.1:898
Smuts of, treatment of. 1892 .....	A1.9:5
South Carolina. 1870. p. 355 .....	A27.9:8
Spring, culture in Northwest (Andrews) .....	A1.6:40
Straw and stubble of, specimens requested (Rusk). n. d. ....	A28.4:12
Surplus of corn and foreign distribution of. 1890. p. 212 .....	A27.9:28
Tennessee culture of. 1875. p. 399 .....	A27.9:13
Trade of world. 1867. p. 340 .....	A27.9:5
United States, from eastern Asia. 1897 .....	A12.4:17
Varieties of—	
extension of tests applied to. 1890. p. 131 .....	A10.5:2
grown in United States. 1888. p. 229 .....	A27.9:26
Victoria, Australia, crop. 1894. p. 26 .....	A27.9:33
Virginia culture of (Pleasants). 1869. p. 231 .....	A27.9:7
Weight of, per bushel. 1889. p. 63 .....	A27.9:27
Western culture, ruinous. 1867. p. 321 .....	A27.9:5
What science can teach about (Richardson). p. 67 .....	A1.7:2
Wide drilling and tilling of. 1870. p. 485 .....	A27.9:8
Winter, condition of—	
1868. p. 185 .....	A27.9:6
1871. p. 468 .....	A27.9:9
1872. p. 10 .....	A27.9:10
1873. p. 135 .....	A27.9:10
1876. pp. 25, 77, 160, 222, 453 .....	A27.9:14
1883 .....	A27.9:21
Winter and spring, notes on. 1865. No. 2. p. 16 .....	A27.9:3
World's crop—	
1886. p. 94 .....	A27.9:25
1888. p. 75 .....	A27.9:27

# Index

	Classification no.
Wheat—Continued	
World's crop—Continued	
1889. p. 106 .....	A27.9:28
1891. p. 78 .....	A27.9:30
1893. p. 85 .....	A27.9:31
1891-94. p. 80 .....	A27.9:33
1894. p. 99 .....	A27.9:32
1896 .....	A27.4:2
Young, in Indiana, larvæ of crane-fly destroying (Webster).	
1890. p. 12 .....	A9.7:3
See also Cereals, American — Crops, principal — Fultz wheat — India — Sheaf wheat.	
Wheat bran for fattening pigs (Duggar). p. 496.....	A4.1:898
Wheat grain and wheat straw, grown at Rothamsted in different seasons and by different manures, composition of ash of (Lawes and Gilbert). p. 85 .....	A7.3:4
Wheat pest, new, report of (Coquillett). 1895. p. 406 .....	A9.7:7
Wheat region:	
Minnesota and North and South Dakota, Russian thistle and other troublesome weeds of. 1893.....	A1.9:10
Weather Bureau, service, instructions governing (Berry). 1897..	A29.12:C81
Wheat saw-flies, notes on (Riley and Marlatt). 1891. p. 168.....	A9.7:4
Wheat shorts as food for pigs (Plumb and Anderson). p. 463.....	A4.1:899
Wheatland, Wyo., irrigation at, use of water for (Johnston). 1902. p. 207.....	A10.3:104
"Wheel bugs" destroying hive bees, note on. 1886. p. 44.....	A9.3:12
Wheeler, Homer Jay:	
Liming of soils.....	A1.9:77
Phosphoric acid determination, increased accuracy in. 1901. p. 44.....	A7.3:62
Plant-soil tests—	
danger of drawing erroneous conclusions from. 1898. p. 60.	A7.3:56
possibility of drawing erroneous conclusions from. 1899. p. 113.....	A10.3:65
Soils, acidity on upland or naturally well-drained, report on necessity of tests for. 1895. p. 45.....	A7.3:47
Wheeler, Homer Jay, Armsby, Henry Prentiss, Woods, Charles Dayton, and Wiley, Harvey Washington. Fertilizer inspection laws, needed reforms in. 1897.....	A7.4:3
Wheeler, Homer Jay, and Hartwell, Burt L. Phosphoric acid, determination of, use of ammonium nitrate in. 1892. p. 53....	A7.3:35
Wheeler, William M. Xiphidium ensiferum, oviposition and embryonic development of, notes on. 1890. p. 222.....	A9.7:2
Wheelmen, American, League of, remarks at good roads banquet of, at Albany, N. Y., February 11, 1897. p. 15 .....	A22.4:28
Whipplei. See Yucca whipplei.	
Whirlwinds, local, in New Brunswick, notes on (Kain). 1900. p. 488.	A29.6:28
Whitaker, George M. Milk supply of Boston and other New England cities. 1898 .....	A4.3:20
White, C. A., and Aughey, Samuel:	
Artesian well near Fort Lyon, Colo. p. 26.....	A1.1:881-2
Artesian wells upon great plains, report of Geological Commission. 1882 .....	A1.8:19
White, H. C.:	
Address of, as president of Association of American Agricultural Colleges and Experiment Stations, at twelfth annual convention, 1898. p. 34.....	A10.3:65
same, committee report on. p. 74.....	A10.3:65
Agricultural colleges, what should be taught at. 1896. p. 75....	A10.3:41
Cotton, manuring of. 1896. p. 169.....	A10.3:33
same, Jan., 1897 .....	A1.9:48
White, J. W., address of, before national road conference. July, 1894. p. 42 .....	A22.3:10
White ant:	
Circular on (Marlatt). 1902.....	A9.5:50
Species injurious to wall paper, books, timbers, etc. (Marlatt.) 1896. p. 70 .....	A9.6:4

# Index

## Classification no.

White Chester breed of swine (Morris). p. 475 .....	A1.1:865
White fir, disease of (Hartig). 1889. p. 164.....	A28.5:5
White fly investigation, review of, with incidental problems (Gos- sard). 1902. p. 68.....	A9.6:31
White grubs:	
Allorhina, note on (Townsend). 1891. p. 25 .....	A9.7:4
Kerosene emulsion as remedy for. 1888. p. 48.....	A9.7:1
Life history of (Forbes). 1891. p. 239 .....	A9.7:3
White kafir corn. <i>See</i> Kafir corn.	
White-marked tussock moth. <i>See</i> Tussock moth.	
White pine:	
Insect enemies of (Chittenden). 1899. p. 55 .....	A13.3:22
Report on (Spalding), revised and enlarged by B. E. Fernow. 1899 .....	A13.3:22
Wood of (Roth). 1899. p. 73 .....	A13.3:22
White scale. <i>See</i> <i>Icerya</i> .	
Whitehead, Mortimer. Signals, Weather Bureau. 1892. p. 46....	A29.3:7
Whitewater, Wis., ground-water at, fluctuations in level and rate of movement of (King). 1892 .....	A29.3:5
Whitney, Milton:	
Announcement of functions of Soils Division, Agriculture Depart- ment. 1894 .....	A26.4:1
Climatology vs. meteorology. 1898. p. 301.....	A29.6:26
Climatology and soils in their relation to cotton cultivation. 1896. p. 143.....	A10.3:33
Field operations of Soils Division, Agriculture Department, in 1899. p. 13 .....	A1.8:64
Rainfall and charts of rainfall. 1902. p. 233 .....	A29.6:30
Rice soils of South Carolina. 1893. p. 77.....	A27.8:6
Salt content of alkali waters and soils, instructions for determining in field. 1900.....	A26.4:6
Soil collection of Division of Soils, Agriculture Department, catalogue of first 4,000 samples in. 1899.....	A26.3:16
Soil features that should be recognized in all plat work. 1891. p. 91.....	A10.3:7
Soil investigations in United States. 1899. p. 335.....	A1.10:899
Soil—	
reasons for cultivating. 1895. p. 123.....	A1.10:895
samples of, for moisture determination, instructions for taking. 1894 .....	A26.4:2
Soil survey, purpose of. 1901. p. 117.....	A1.10:901
Soils—	
Exhaustion and abandonment of, testimony before Industrial Commission. 1901 .....	A1.8:70
in their relation to crop production. 1894. p. 129 .....	A1.10:894
of Florida, preliminary report on. 1898.....	A26.3:13
physical analysis of. 1895. p. 62 .....	A7.3:47
problems, some interesting. 1897. p. 429 .....	A1.10:897
some physical properties of, in their relation to moisture and crop distribution. 1892.....	A29.3:4
Soils Division, Agriculture Department—	
field operations of—	
1899 .....	A1.8:64
1900 .....	A26.5:900
1901 .....	A26.5:901
work of, for farmer. 1897. p. 122 .....	A1.10:897
Sumatra tobacco, growing, under shade in Connecticut Valley. 1902 .....	A26.3:20
Tobacco, methods of curing .....	A1.9:60
Tobacco investigations of Agriculture Department. 1901. p. 108.	A10.3:99
Tobacco soils. 1898 .....	A1.9:83
Tobacco soils of United States; a preliminary report upon soils of principal tobacco districts. 1898 .....	A26.3:11
<i>See also</i> Schulte, J. I.; as joint author, Marvin, Charles Frederick.	
<i>See also</i> , for reports as Chief of Division of Agricultural Soils, 1894 to 1896; Soils Division, 1897 to 1900; Soils Bureau, 1901 and 1902 .....	A26.1:

# Index

	Classification no.
Whitney, Milton, and Briggs, Lyman James. Electrical method of determining temperature of soils. 1897 .....	A26.3:7
Whitney, Milton, and Floyd, Marcus L. Tobacco industry, growth of. 1899. p. 429.....	A1.10:899
Whitney, Milton, and Hosmer, Ralph Sheldon. Soil moisture; record of amount of water contained in soils during crop season of 1896. 1897 .....	A26.3:9
Whitney, Milton, and Means, Thomas Herbert:	
Alkali lands. 1899 .....	A1.9:88
Alkali soils of Yellowstone Valley, from preliminary investigation of soils near Billings, Mont. 1898.....	A26.3:14
Cigar leaf tobacco, temperature changes in fermenting piles of. 1899 .....	A1.8:60
Electrical method of determining soluble salt content of soils, etc. 1897 .....	A26.3:8
Whitney, Milton, Gardner, Frank Duane, and Briggs, Lyman James. Electrical method of determining moisture content of arable soils. 1897.....	A26.3:6
Whitson, James H. Agriculture in Idaho Territory. 1869. p. 369.	A27.9:7
Whittle, C. L. Roads, forces which operate to destroy, with notes on road stones and problems therewith connected. 1897 .....	A22.4:29
Wiechmann, F. G. See, as collaborator, Wiley, Harvey Washington.	
Wickson, E. J.:	
Climatology and horticulture. 1900. p. 45 .....	A10.3:76
Dairying in California. 1896.....	A4.3:14
Irrigation—	
field and garden. 1901 .....	A1.9:138
in fruit growing. 1900.....	A1.9:116
of deciduous fruits, notes on. 1900. p. 80 .....	A10.3:76
practice among fruit growers on Pacific coast. 1902.....	A10.3:108
Wide tires, laws of certain States relating to their use (Stone). 1895.	A22.3:12
Widmann, Otto. House sparrow, passer domesticus, and European tree sparrow, passer montanus, at St. Louis, Mo., history of. 1889. p. 191 .....	A5.3:1
Wier, D. B. Plums, native, how to fruit them, they are practically curculio proof. 1887. p. 39.....	A9.3:14
Wiggins, S. M. Truck farming in Louisiana. 1887. p. 240.....	A27.9:25
Wight, R. Allan:	
Icerya purchasi and Vedalia cardinalis in New Zealand. 1893. p. 194.....	A9.7:6
New Zealand katipo, report on. 1889. p. 134.....	A9.7:2
Potato-tuber moth, report on. 1893. p. 163 .....	A9.7:5
Root fungus of New Zealand. 1889. p. 199.....	A28.5:5
Wilbour, Joshua. Animals, dead, disposition of, in Dublin. p. 347.	A4.1:899
Wilcox, Earley Vernon:	
Calves, feeding, with milk of tuberculous cows. 1899. p. 23....	A1.9:107
Cattle, northern, protecting against Texas fever. 1900. p. 27...	A1.9:119
Larkspur poisoning of sheep. p. 473.....	A4.1:898
Milk, tuberculosis in, killing the germs of. 1899. p. 24 .....	A1.9:107
Paris green, low grade, use of, to fruit growers. 1900. p. 14....	A1.9:114
Petroleum, crude, as an insecticide. 1900. p. 15 .....	A1.9:114
Plant poisoning of stock in Montana. p. 91 .....	A4.1:900
See also, as joint author, Allen, Edwin West — Chesnut, Victor King.	
Wild, Heinrich, short biography of. 1902. p. 451 .....	A29.6:30
Wild animals. See Animals.	
Wild-cherry leaves, poisoning by (Evans). p. 16.....	A1.9:103
Wild flowers (Gardner). p. 155.....	A1.1:862
Wilder, Marshall P. American Pomological Society, history and progress of. p. 149 .....	A1.1:870
Wilder, Marshall P., Thompson, Alexander, Flagg, William J., and Barry, Patrick. Vine, culture and products of, report to United States Commission at Paris Exposition of 1867. p. 163.	A1.1:867
Wiley, Harvey Washington:	
Address of, as president of Association of Official Agricultural Chemists, at third annual convention. 1886. p. 6.....	A7.3:12

**Wiley, Harvey Washington—Continued**

Agricultural chemical analysis, apparatus used in, some new forms of, explanation of. 1890. p. 96 .....	A7.3:28
Basic phosphatic slags, mechanical analysis of. 1896. p. 78.....	A7.3:49
Beet-sugar industry in United States—	
1897. p. 11 .....	A1.2:B39 <sup>1</sup>
1898. p. 131 .....	A1.2:B39 <sup>4</sup>
1900. p. 123 .....	A1.8:69
Butter, nostrums for increasing yield of. 1893.....	A1.9:12
Butter fat, refractive index of. 1888. p. 36.....	A7.3:19
Canned meats, chemical examination of, circular on. 1899.....	A7.4:5
Cereals and cereal products, adulteration of, investigations made under direction of, with collaboration of Karl P. McElroy, William Henry Krug, T. C. Trescot, Willard Dell Bigelow, and others. 1898. p. 1169.....	A7.3:13 <sup>9</sup>
Cereals collected at World's Columbian Exposition, analyses of and comparisons with other data. 1895.....	A7.3:45
Chemistry Division, Agriculture Department, work of, for farmer. 1897. p. 76 .....	A1.10:897
Chemistry, relation of, to progress of agriculture. 1899. p. 201 .....	A1.10:899
Chemists, Official Agricultural, Association of, historical sketch of. 1899. p. 16 .....	A7.3:57
Diffusion—	
its application to sugar cane, and record of experiments with sorghum in 1883. 1884 .....	A7.3:2
methods and machinery for application of, to extraction of sugar from sugar cane and sorghum, and for use of lime and carbonic and sulphurous acids in purifying the diffusion juices. 1886 .....	A7.3:8
Diffusion and carbonatation, experiments with, at Ottawa, Kans. 1885 .....	A7.3:6
Industries and arts, true relations of science to. 1883. p. 32....	A1.7:2
Infant and invalid foods, analysis of, provisional methods for. 1902. p. 41 .....	A7.3:65
Lard and lard adulterants. 1889. p. 405 .....	A7.3:13 <sup>4</sup>
Maize (Indian corn)—	
composition of, etc. 1898 .....	A7.3:50
same (French abstract). 1900.....	A7.4:6
food value of. 1891. p. 17 .....	A1.8:49
Mineral phosphates as fertilizers. 1894. p. 177 .....	A1.10:894
Northern sugar industry, a record of its progress during season of 1883 .....	A7.3:3
Pigs, carcasses of, chemical composition of, report on, with collaboration of Ervin Edgar Ewell, William Henry Krug, T. C. Trescot, and others. 1898.....	A7.3:53
Plants, chemical composition of, influence of environments on. 1901. p. 299 .....	A1.10:901
Potash and its function in agriculture. 1896. p. 107 .....	A1.10:896
Proteid bodies, separation of, from flesh bases by means of chlorin and bromin. 1898. p. 27.....	A7.3:54
Soil ferments important in agriculture. 1895. p. 69.....	A1.10:895
Sorghum cane, experiments with. 1883. p. 423 .....	A1.1:883
Sorghum, experiments in manufacture of sugar from—	
1886, at Fort Scott, Kans .....	A7.3:14
1888, at Rio Grande, N. J., Kenner, La., Conway Springs, Douglas, and Sterling, Kans.....	A7.3:20
same, in 1889.....	A7.3:26
1890 .....	A7.3:29
1891, report on, with collaboration of Guilford Lawson Spencer, Albert A. Denton, and Wibray J. Thompson.....	A7.3:34
1892, with collaboration of Albert A. Denton, Glen O'Brien, C. I. Hinman, Wibray J. Thompson, John L. Fuelling, and Oma Carr .....	A7.3:37
1893, with collaboration of Oma Carr and C. I. Hinman.....	A7.3:40
Starch, manufacture of, from potatoes and cassava. 1900.....	A7.3:58

# Index

	Classification no.
Wiley, Harvey Washington—Continued	
Sugar, molasses, and sirup, confections, honey, and beeswax, adulteration of, investigations made under direction of, with collaboration of Henry Augustus Huston, H. H. Nicholson, W. B. Rising, Melville Amasa Scovell, S. P. Sharples, William Carter Stubbs, Shippen Wallace, F. G. Wiechmann, Henry Adam Weber, and Karl P. McElroy.....	A7.3:13 <sup>6</sup>
Sugar analysis—	
notes on methods of. 1890. p. 129.....	A7.3:28
remarks on report of committee on sugar, Association of Official Agricultural Chemists. 1888. p. 54.....	A7.3:19
Sugar beet—	
composition of, influence of environment upon. 1901.....	A7.3:64
culture of. 1891.....	A1.9:3
culture, seed development, manufacture, and statistics.....	A1.9:52
experiments with—	
1890 .....	A7.3:30
1891, with collaboration of Walter Maxwell, W. A. Henry, and others. ....	A7.3:33
1892, with collaboration of Walter Maxwell.....	A7.3:36
1893 .....	A7.3:39
1897 .....	A7.3:52
grown in various States, analyses of .....	A1.2:B39 <sup>3</sup> ;
same, p. 135.....	1.2:B39 <sup>1</sup>
industry in, culture of sugar beet and manufacture of beet sugar. 1890 .....	A7.3:27
Sugar industry of United States, cane sugar, beet sugar, sorghum sugar, maple sugar. 1885.....	A7.3:5
Sunflower plant, its cultivation, composition, and uses. 1901....	A7.3:60
Sweet cassava, its culture, properties, and uses. 1894.....	A7.3:44
Table sirups, manufacture of, from sugar cane. 1902.....	A7.3:70
Tanning materials, official methods for analysis of. 1901.....	A7.4:8
Zinc in evaporated apples. 1896.....	A7.3:48
<i>See also</i> , for reports as Chemist, Chemistry Bureau, Agriculture Department, 1884–1902.....	A7.1:
<i>See also</i> , as editor, Chemical analysis, methods of, 1895 and 1898; Chemists, Official Agricultural, Association of, proceedings of, 1889–1901—as joint author, Wheeler, Homer Jay.	
Wiley, Harvey Washington, and Krug, William Henry. Filter-tube method, international and official hide-powder method, comparison of. 1901. p. 136 .....	A7.3:62
Wilkinson, H. E. Meteorological observations at public schools. 1899. p. 550 .....	A29.6:27
Wilkinson, Levi Washington. Phosphates, native, containing iron and aluminum, analysis of, proposed method for. 1891. p. 107.	A7.3:31
Willard, X. A.:	
American dairying, rise, progress, and national importance. p. 431.	A1.1:865
Dairying of America and England, their points of difference and comparative merits. p. 358 .....	A1.1:866
Willcocks, W. Nile [River]. 1894. p. 121 .....	A29.3:11 <sup>1</sup>
Willdenow herbarium, American panicums in (Holm). 1897. p. 17.	A3.3:4
Willet, J. E. Cotton worm in Georgia in 1878. p. 358 .....	A9.2:C82
Willets, J. H.:	
Seeds, purchase and distribution of—	
1898. p. 1 .....	A1.1:898
1899. p. 3 .....	A1.1:899
1900. p. 7 .....	A1.1:900
Willets Point, N. Y., auroras at, record of 1870–85 (Abbe). p. 253...	A29.6:22
Williams, C. B.:	
Ammonia results in mixed fertilizers, variable. 1901. p. 28 ....	A7.3:62
Kilgore's modification of volumetric method of estimating phosphoric acid. 1901. p. 55 .....	A7.3:62
Soils, phosphoric acid in, estimation of, by double precipitation with molybdic solution and titration of ammonium phosphomolybdate with standard alkali. 1895. p. 82.....	A7.3:47
<i>See also</i> , as joint author, Kilgore, Benjamin Wesley.	
Williams, Franklin, jr. Clearing new land. 1902.....	A1.9:150



	<b>Index</b>
	<b>Classification no.</b>
<b>Williams, H. E.:</b>	
Food products, protection of, from injurious temperatures. 1901.	A1.9:125
Harmon, John H., short biography of. 1899. p. 107.....	A29.6:27
Temperatures injurious to food products in storage and during transportation and methods of protection from same.....	A29.3:13
Wappenhans, C. F. R., short biography of. 1902. p. 87.....	A29.6:30
<b>Williams, Thomas Albert:</b>	
Crimson clover. 1899.....	A3.4:17
Forage, succulent, for farm and dairy. p. 613.....	A1.10:899
Grass and forage investigations, cooperative work of Department of Agriculture with State experiment stations. 1900.....	A1.4:8
same. 1901. p. 148.....	A10.3:99
Grasses and forage plants and forage conditions of eastern Rocky Mountain region. 1898.....	A3.3:12
Grasses and forage plants of the Dakotas. 1897.....	A3.3:6
Millets, report on—	
1898. p. 267.....	A1.10:898
1899.....	A1.9:101
Poa fendleriana and its allies. 1899.....	A3.4:10
Prairie pastures, worn out native, renewing of.....	A3.4:4
Rape as a forage plant. 1899.....	A3.4:12
Sorghum as a forage crop.....	A1.9:50
Soy bean as a forage crop.....	A1.9:58
Timothy in prairie region. 1896. p. 147.....	A1.10:896
Williams, W. Bronchitis in cattle. p. 603.....	A1.1:880
<b>Williams, W. L.:</b>	
Cerebro-spinal meningitis, enzootic, among horses, and hog cholera in Idaho. 1898. p. 179.....	A4.1:897
Mares, infectious abortion of. p. 449.....	A4.1:889-90
Willis area, Texas, soil survey of (Martin). p. 607.....	A26.5:901 <sup>1</sup>
<b>Williston, S. W.:</b>	
Australian parasite of <i>Icerya purchasi</i> . 1888. p. 21.....	A9.7:1
Belvosia, study of. 1893. p. 238.....	A9.7:5
Diptera of Death Valley expedition, list of. 1893. p. 253.....	A5.5:7
Lestophonous, genus, note on. 1889. p. 328.....	A9.7:1
<b>Willits, Edwin:</b>	
Address of—	
before convention of National League for Good Roads. Wash- ington, 1893. p. 21.....	A10.3:14
before sixth annual convention of Association of Official Agri- cultural Chemists. 1889. p. 6.....	A7.3:24
Agriculture, Assistant Secretary of, duties of, special report on. p. 67.....	A1.1:892
Agriculture, practical, scientific work of Department of Agricul- ture in its relations to. p. 59.....	A1.1:890
Black-rot, downy mildew, and anthracnose of grape, questions regarding.....	A28.4:11
Chicago World's Columbian Exposition, special report on. p. 53. same.....	A1.1:893
Educational forces in United States relating to agriculture, coop- eration of Department of Agriculture with. p. 65.....	A5.1:893
Fiber plants, raising and testing of. 1890. p. 124.....	A1.1:891
Industrial education, paper on. 1885. p. 55.....	A10.5:2
Letter on <i>Icerya purchasi</i> . 1889. p. 15.....	A1.7:9
Peach trees, leaf curl of, letter of inquiry relative to. 1893.....	A9.7:2
Textile fiber production. p. 46.....	A28.4:13
	A1.1:889
<b>Willow:</b>	
Cimbex injuring, in Nebraska (Webster). 1890. p. 228.....	A9.7:2
Osier, note on (Watts). 1873. p. 419.....	A27.9:11
Willow-shoot sawfly, report on (Riley) 1888. p. 8.....	A9.7:1
Willow slug, yellow-spotted, report on (Howard). 1888. p. 33....	A9.7:1
<b>Willson, George H.:</b>	
San Francisco weather-forecast district, report of, Feb., March, 1899.....	A29.6:27
same, Sept., Oct., 1900.....	A29.6:28
See also, as joint author, McAdie, Alexander G.	
<b>Wilson, C. T. R.</b> Atmospheric air, ionisation of. 1901. p. 159....	A29.6:29

# Index

	Classification no.
Wilson, G. W. Oleomargarine, ingredients of. p. 513.....	A4.1:900
Wilson, James:	
Address of—	
before American Association of Farmers' Institute Workers,	
at seventh annual meeting. 1902. p. 45.....	A10.3:120
before Association of American Agricultural Colleges and	
Experiment Stations, at twelfth annual convention. 1898.	
p. 42.....	A10.3:65
Cattle industry of United States. p. 267.....	A4.1:901
Forests and forest conditions of southern Appalachian mountain	
region. p. 13.....	A1.2:Ap4 <sup>2</sup>
Speech delivered July 7, 1902, at school of agriculture, Colum-	
bus, Ohio.....	A1.2:W69
<i>See also</i> , for reports as Secretary of Agriculture, 1897-1901.....	A1.1:
Wilson, James, and Curtiss, Charles Franklin. Lambs, feeding of.	
p. 463.....	A4.1:898
Wilson, James Maxwell:	
Irrigation investigations—	
Cache Creek, Cal. 1901. p. 155.....	A10.3:100
Nevada. 1902. p. 147.....	A10.3:104
Water laws of Nebraska. 1899. p. 58.....	A10.3:58
<i>See also</i> , as joint author, Bond, Fred.	
Wilson, James W. <i>See</i> , as joint author, Curtiss, Charles Franklin.	
Wilson, James W., and Hill, George G. Chicago, Ill., international	
live-stock exposition of 1900, notes on. p. 63.....	A4.1:900
Wilson, Lawrence. Live-stock industry, condition of, west of Mis-	
sissippi River. p. 429.....	A4.1:885
Wilson, Thomas. Lace, description and history of. 1897. p. 359..	A11.5:9
Wilson, Wilford M.:	
Climate and man: with special regard to climate and climatic	
elements as curative or causative agencies of disease. 1902.	
p. 104.....	A29.3:31
"Indian summer." 1902. p. 440.....	A29.6:30
Meteorological statistics, how to improve them to meet needs of	
medical profession, etc. 1899. p. 82.....	A29.3:24
Wilt disease:	
Cotton and its control (Orton). 1900.....	A28.3:27
Cotton, watermelon, and cowpea (Smith). 1899.....	A28.3:17
Cowpea and its control (Orton). 1902.....	A19.3:17
Wind-barometer table, report on (Garriott). 1897. p. 204.....	A29.6:25
Wind-roses for Oklahoma, notes on 1891-99 (Abbe). p. 21.....	A29.6:28
Wind scale, Beaufort, as used at sea (Abbe). 1894. p. 175.....	A29.6:22
Wind signal orders, cipher code of, amending instructions to special	
displaymen. 1892.....	A29.2:C49
Wind vanes (Cronk). 1899. p. 165.....	A29.3:24
Windmills:	
Efficiency of, note on (Abbe). 1897. p. 164.....	A29.6:25
Feed mills and. 1902. p. 31.....	A1.9:149
Wind-rush at Washington, D. C., Sept. 29, 1896 (Hazen). p. 322...	A29.6:24
Windstorm, local electricity in, in Wyoming (Abbe). 1894. p. 509.	A29.6:22
Winds:	
Clouds and, report on (Brillouin) 1897. p. 437.....	A29.6:25
Currents and, Broun's law of, notes on (Abbe). 1898. p. 264..	A29.6:26
Direction and velocity, hourly results from self-registers for	
recording (Abbe). 1897. p. 252.....	A29.6:25
Direction of—	
some observations of, at different altitudes around West India	
cyclones (Boyer). 1892. p. 50.....	A29.6:20
vertical gradients of (Frankenfield). 1898.....	A29.5:F
Diurnal, on faint gradient in northwestern New Mexico (Dodge).	
1901. p. 299.....	A29.6:29
Effect of, on catch of rainfall (Abbe). 1899. p. 308.....	A29.6:27
same (Symons). 1899. p. 454.....	A29.6:27
Effect of mountains on (Abbe). 1894. p. 510.....	A29.6:22
Force of—	
first attempt to measure (Abbe). 1896. p. 335.....	A29.6:24
in tornadoes, notes on (Kimball). 1901. p. 419.....	A29.6:29

**Winds—Continued**

**Hot—**

- chinooks and (Abbe). 1894. p. 77 ..... A29.6:22
- Kansas (Abbe). 1897. p. 260 ..... A29.6:25
- Missouri (Abbe). 1897. p. 260 ..... A29.6:25
- Hurricane, studies on (Abbe). 1894. p. 372 ..... A29.6:22
- Injurious to vegetation and crops (Curtis). 1895. p. 435 ..... A29.3:11<sup>2</sup>
- Japan and Arizona (Abbe). 1895. p. 255 ..... A29.6:23
- Local, that are not tornadoes, notes on (Abbe). 1899. p. 312 .. A29.6:27
- Maximum pressure of, note on (Abbe). 1900. p. 68 ..... A29.6:28
- Measurement of, notes on (Abbe). 1898. p. 358 ..... A29.6:26
- Minnesota, movements of (Abbe). 1897. p. 252 ..... A29.6:25
- Monthly notes on, July, 1891–Oct. 1902 ..... A29.6:
- Movement of thunderstorms against (Abbe). 1895. pp. 383, 423, 465 ..... A29.6:23
- New Haven, 1873–1900 (Davis). p. 261 ..... A29.6:30
- Nomenclature of, report on (Proctor). 1897. p. 54 ..... A29.6:25
- Origin of descending gusts of (Abbe). 1897. pp. 351, 447 ..... A29.6:25
- Phenomena and lake levels (Henry). 1900. p. 203 ..... A29.6:28
- Popular queries about, with answers (Kimball). 1901. p. 422.. A29.6:29
- Prevailing and resultant, comparison of (Abbe). 1893. p. 365.. A29.6:21
- same (Abbe). 1897. p. 400 ..... A29.6:25
- Rain gage and notes on (Abbe). 1899. p. 464 ..... A29.6:27
- Resultant—**
- calculation of, notes on (Abbe). 1899. p. 421 ..... A29.6:27
- mechanical determination of, note on (Abbe). 1897. p. 540. A29.6:25
- Sand dunes and, notes on (Abbe). 1901. p. 176 ..... A29.6:29
- Temperature and, notes on (Abbe). 1901. p. 218 ..... A29.6:29
- Velocity and fluctuations of water level on Lake Erie (Henry). 1902 ..... A29.5:J
- Velocity of, early measurements of (Abbe). 1896. p. 459 ..... A29.6:24
- Warm, note on (Abbe). 1895. p. 57 ..... A29.6:23
- Weather and, local contrasts of (Abbe). 1894. p. 509 ..... A29.6:22
- See also*, Anemometer — Baguios — Chinook winds — Clima-  
tology — Cyclone — Dancing dervishes — Derecho — Hurri-  
canes — Pamperos — Tornadoes — Typhoon.

Windward Islands, rainfall of (Jefferson). 1901. p. 56 ..... A29.6:29

Wine land, is Texas a? (Bauer). 1869. p. 451 ..... A27.9:6

**Wines:**

- Adulteration of (Crampton). 1887. p. 263 ..... A7.3:13<sup>3</sup>
- American—**
- composition of (Bigelow). 1900 ..... A7.3:59
- composition of, and substances used in their adulteration  
(Crampton). p. 183 ..... A1.1:887
- wine grapes and, examination of. 1867. p. 327 ..... A27.9:5
- wine-making and (Husmann). p. 154 ..... A1.1:867
- Analysis of, European methods of, etc. 1887. p. 383 ..... A7.3:13<sup>3</sup>
- Beers, etc., analysis of, methods proposed for adoption for use in  
Austria. 1893. p. 155 ..... A7.3:38
- Chemical analysis of (McMurtrie). 1873. p. 240 ..... A27.9:11
- Consumption of, in United States, per capita of population—
- 1870–1895. p. 552 ..... A1.10:895
- 1896. p. 595 ..... A1.10:896
- 1898. p. 723 ..... A1.10:898
- Copper in (Fallot). 1890. p. 96 ..... A6.3:11
- French crop. 1875. p. 115 ..... A27.9:14
- French, adulteration of, 1876. p. 365 ..... A27.9:14
- Growing in California. 1868. p. 280 ..... A27.9:6
- Heating of (McMurtrie). 1873. p. 244 ..... A27.9:11
- Making—**
- grape-culture in El Paso del Norte and (Pierson). 1873. p. 24. A27.9:11
- vine culture in Middle States and (Lodge). p. 118 ..... A1.1:866
- Manufacture of grape, blackberry, and other fruit wines, on Gall's  
method (Bossert). p. 156 ..... A1.1:863
- Napa County, Cal., industry (Husman). 1891. p. 535 ..... A27.9:29
- New Mexico. 1866. p. 424 ..... A27.9:4
- Poisoning in France. 1876. p. 487 ..... A27.9:14

# Index

	Classification no.
<b>Wines—Continued</b>	
Production of—	
in France in 1883. 1884. No. 9. p. 45 .....	A27.9:22
mineral nutrition of vine for (McMurtrie). 1882. p. 180 ....	A1.8:22
Scuppernong, analysis of—	
1868. p. 362 .....	A27.9:6
1869. p. 22 .....	A27.9:7
<i>See also</i> California wines and brandies — Grape must — Grape vine — Grapes — Vine.	
<b>Wing, H. H.:</b>	
Dairy industry of United States, report accompanying exhibit of Animal Industry Bureau, at Paris Exposition of 1889. p. 387.	A4.1:887-8
Feeding experiments, special points bearing on. 1891. p. 93....	A10.5:3
<b>Winnemucca, Nev., forage conditions between Ontario, Oreg., and (Griffiths). 1902 .....</b>	A19.3:15
<b>Winslow, Alfred A. Horse breeding in Belgium. p. 503 .....</b>	A4.1:900
<b>Winslow, Edward D. Animals, dead, disposition of, in Stockholm. p. 360 .....</b>	A4.1:899
<b>Winston-Salem, N. C., good roads convention at, proceedings of. 1902. p. 11 .....</b>	A22.3:23
<b>Winter:</b>	
Bee-keeping in (Tupper). p. 209 .....	A1.1:867
Farm animals in. 1875. p. 84 .....	A27.9:13
Forage crops for the South (Ball). 1902 .....	A1.9:147
Irrigation in, note on (Abbe). 1900. p. 17 .....	A29.6:28
Irrigation of deciduous orchards. 1901. p. 12 .....	A1.9:144
Severe, benefits of (Abbe). 1899. p. 62 .....	A29.6:27
<b>Winter washes, experiments with, against San Jose scale, season of 1894-95 (Marlatt). 1895. p. 365 .....</b>	A9.7:7
<b>Winters:</b>	
Are our winters changing? (Henry). 1898. p. 540 .....	A29.6:26
Are they becoming colder? 1868. p. 214 .....	A27.9:6
<b>Winton, Andrew Lincoln:</b>	
Address of, as president of Association of Official Agricultural Chemists at fifteenth annual convention. 1898. p. 9 .....	A7.3:56
Baking powder and baking-powder chemicals, analysis of, provisional method for. 1902. p. 98 .....	A7.3:65
Milk, solids and fat in, Babcock gravimetric method for determination of. 1893. p. 119 .....	A7.3:38
Potash—	
bichromate of, does cream lose fat on keeping for long time with and without? 1894. p. 192 .....	A7.3:43
Lindo-Gladding method of determining, report of use of sodium chloride in. 1891. p. 148 .....	A7.3:31
Spices, analysis of, provisional method for. 1902. p. 55 .....	A7.3:65
<i>See also</i> , as joint author, Jenkins, Edward Hopkins.	
<b>Wire:</b>	
Early use of, in kite flying (Fergusson). 1897. p. 135 .....	A29.6:25
Irrigation by use of, notes on (Betts). 1899. p. 301 .....	A29.6:27
same (Abbe). 1899. p. 473 .....	A29.6:27
<b>Wire fences, lightning on, notes on (Abbe). 1898. p. 466 .....</b>	A29.6:26
<b>Wireless telegraphy, note on (Abbe). 1900. pp. 12, 113, 294 .....</b>	A29.6:28
<b>Wireworms:</b>	
Life history of (Hart). 1891. p. 246 .....	A9.7:3
Soda ash for. 1869. p. 300 .....	A27.9:7
<b>Wisconsin:</b>	
Cattle trade and allied industries of (Perry). p. 125 .....	A4.1:886
Clover-seed midge in, note on. 1886. p. 39 .....	A9.3:12
Farm resources and products of. 1868. p. 189 .....	A27.9:6
Farmers' institute work accomplished in (McKerrow). 1902. p. 31.	A10.3:120
Flax culture in (Bosse). 1892. p. 43 .....	A11.5:4
Forestry conditions and interests of, report on (Roth). 1898 ....	A13.3:16
same, introduction to report (Fernow). 1898. p. 7 .....	A13.3:16
Fruit culture in. 1868. p. 322 .....	A27.9:6
Horticulture in (Peffer). 1882. p. 174 .....	A1.8:22
Irrigation experiments in (King). 1902. p. 313 .....	A10.3:119

<b>Wisconsin—Continued</b>	
Live-stock industry of, condition of (Campbell). p. 321.....	A4.1:889-90
Northern, wild fruits of. 1890. p. 484.....	A27.9:28
Sugar-beet experiments in, in 1891 (Woll). p. 90.....	A7.3:33
<i>See also</i> La Crosse — Milwaukee — New Richmond — Whitewater.	
Wisconsin Agricultural Experiment Station farm, ground-water on, fluctuations in level and rate of movement of (King). 1892..	A29.3:5
Witch-hazel, two species of plant-lice inhabiting, life history of (Pergande). 1901 .....	A9.8:9
Withcombe, James. Sheep husbandry of Pacific Northwest. 1900. p. 5.....	A1.9:117
Withers, W. A. Nitrification as an element of soil productiveness. 1902. p. 87 .....	A10.3:115
Withers, W. A., and Fraps, G. S.:	
Ammonium sulphate and cotton-seed meal in different soils, nitrification of. 1902. p. 36 .....	A7.3:67
Nitrification of certain fertilizers. 1901. p. 25 .....	A7.3:62
Woeikoff, A. Rainfall and charts of rainfall. 1902. p. 232.....	A29.6:30
Wohl, A. Carbohydrates, character of, abstract of paper on. 1890. p. 134.....	A7.3:28
Wolfer, A. Wolf's sun-spot relative numbers, revision of. 1902. p. 171.....	A29.6:30
Wolfinger, J. P. Indian corn culture. p. 215.....	A1.1:866
Wolf's sun-spot relative numbers, revision of (Wolfer). 1902. p. 171 .....	A29.6:30
Woll, Fritz Wilhelm:	
Agricultural education and research in Scandinavian countries and Finland. 1898. pp. 605, 703.....	A10.6:9
Agricultural education in Scandinavian countries, notes on. 1897. p. 7 .....	A10.4:32
Scandinavian seed-control stations, report on. 1899. p. 4 .....	A10.6:10
Sugar-beet experiments in Wisconsin in 1891. p. 90 .....	A7.3:33
Wollaber, A. B. Thermographs, furnishing of, to voluntary observers, records to be kept at section centers. 1902. p. 219.....	A29.3:31
Wollaber, E. A. Portland, Oreg., weather forecast district, monthly report of, September, 1900.....	A29.6:29
Same. February, 1901.....	A29.6:30
Wollny, Ewald:	
Physical properties of soil, nature of. 1896. pp. 761, 853, 948...	A10.6:6
Soil, relation of physical properties of, to cultivation of plants. 1893. pp. 528, 627.....	A10.6:4
Soils—	
artificial changes of physical properties of. 1900. p. 604 .....	A10.6:11
physical properties of, adaptation of methods of cultivation and manuring to. 1900. p. 805 .....	A10.6:11
Wollny method, application of, to mixed butters (Besana). 1890. p. 105 .....	A7.3:24
Wolves. <i>See</i> Cattle.	
Women's farm institutes (Maddock). 1902. p. 46 .....	A10.3:110
Wood, Mrs. A. F. <i>See</i> , as translator, Charpentier de Cossigny, M. J.	
Wood, Peter. Dew-point, value of, in forecasting weather under certain conditions. 1902. p. 152.....	A29.3:31
Wood:	
American, thirty-two species of, summary of mechanical tests on. Characteristics and properties of, elementary discussion of (Roth). 1895 .....	A13.4:15
same, introduction to (Fernow). 1895. p. 5.....	A13.3:10
Consumers of, information to, relative to increasing durability of timber (Colman). 1887.....	A13.4:3
Different kinds, how to distinguish (Fernow and Roth). 1895. p. 59 .....	A13.3:10
Mechanical tests made at Washington University testing laboratory, St. Louis, Mo. (Johnson). 1893. p. 3 .....	A13.3:8
Mechanical tests of, results of (Johnson). 1893. p. 22.....	A13.3:8
More important, of North America, key to. 1895. p. 64.....	A13.3:10



# Index

Classification no.

## Wood—Continued

- Native, descriptive catalogue of manufactures of, as shown in exhibit of Agriculture Department at World's Industrial and Cotton Exposition at New Orleans, La. (Dodge). 1886 ..... A1.7:10
- Preservation of—
1866. p. 287 ..... A27.9:4
- 1884 (Flad). p. 66 ..... A13.3:1
- same, reprint. 1894. p. 257 ..... A13.3:9
- 1887 (Constable). p. 92 ..... A13.3:1
- same, reprint. p. 276 ..... A13.3:9
- Quality, etc.—
1895. p. 590 ..... A1.10:895
1896. p. 628 ..... A1.10:896
- Seasoning, experiments in (Ellis). 1889. p. 57 ..... A13.3:3
- Structure of, of five southern pines (Roth). p. 133 ..... A13.3:13<sup>1</sup>
- same, rev. ed. 1897. p. 143 ..... A13.3:13<sup>2</sup>
- Test material, field records of (Mohr). 1893. p. 50 ..... A13.3:8
- Trade in certain States (Baker). 1884. p. 198 ..... A13.5:4
- Trade in lumber and, letter from agent of Forestry Division requesting information relative to. 1883 ..... A13.2:L97
- Trade of New Hampshire and West Virginia (Hough). 1884. p. 348 ..... A13.5:4
- Trade of Western States and Territories (Furnas). 1884. pp. 246, 255 ..... A13.5:4
- Uses of (Roth). 1896. p. 391 ..... A1.10:896
- See also* Lumber—Timber.
- Wood char. *See* Brown coal and wood char.
- Wood-creosote oil, report on (Bixby). 1887. p. 99 ..... A13.3:1
- Same, reprint. p. 282 ..... A13.3:9
- Wood duck and woodcock, two vanishing game birds (Fisher). 1901. p. 447 ..... A1.10:901
- Wood-leopard moth in parks of New York City (Southwick). 1894. p. 138 ..... A9.7:7
- Wood lot belonging to E. D. Page, at Oakland, Bergen County, N. J., working plan for (Graves). 1898. p. 301 ..... A1.10:898
- Woodcock and wood duck, two vanishing game birds (Fisher). 1901. p. 447 ..... A1.10:901
- Wooden ties. *See* Railroad ties.
- Woodford, E. S. Fish culture, letter on. 1869. p. 376\* ..... A27.9:7
- Woodhaven, Long Island, N. Y., tornado at (Emery). 1895. p. 252 ..... A29.6:23
- Woodhull, —. Agricultural Department, bureau of information and exchange in, address favoring creation of. 1885. p. 90 .. A1.7:9
- Woodpeckers:
- Food of (Beal). 1895 ..... A5.3:7
- Tongues of (Lucas). 1895. p. 35 ..... A5.3:7
- Woods, Albert Fred:
- Bermuda lily disease, preliminary report of investigations. 1897 .. A28.3:14
- Mosaic disease of tobacco. 1902 ..... A19.3:18
- Plant physiology in relation to horticulture and agriculture. 1901. p. 127 ..... A10.3:99
- Plants, health of, relation of nutrition to. 1901. p. 155 ..... A1.10:901
- Stigmonose, a disease of carnations and other pinks. 1900 ..... A28.3:19
- Vegetable physiology and pathology, work in. 1898. p. 261 .... A1.10:898
- Woody plants, wounds in, principles of pruning and care of. 1895. p. 257 ..... A1.10:895
- See also*, as joint author, Galloway, Beverly Thomas.
- See also*, for report as acting Chief, Division of Vegetable Physiology and Pathology, 1898 ..... A28.1
- Woods, Albert Fred, and Dorsett, Palemon H. Hydrocyanic acid gas, use of, for fumigating greenhouses and cold frames. 1899. A9.5:37
- Woods, Charles Dayton:
- Beef, American and European, comparative composition of, report accompanying exhibit of Animal Industry Bureau, at Paris Exposition of 1889. p. 426 ..... A4.1:887-8

\* By a misprint, this page number appears twice.



**Index**  
Classification no.

Woods, Charles Dayton—Continued	
Meats, composition and cooking. 1896.....	A1.9:34
See also, as joint author, Atwater, Wilbur Olin — Wheeler, Homer Jay.	
Woods, Chas. Dayton, and Merrill, L. H. Bread, investigations on digestibility and nutritive value of. 1900 .....	A10.3:85
Woodsman's Handbook, pt. 1 (Graves). 1902 .....	A13.3:36
Woodward, J. J. Pleuro-pneumonia among cattle, pathological anatomy and histology of respiratory organs in. 1871. p. 64.	A1.2:C29 <sup>2</sup>
Woodworth, C. W:	
California, notes from, on insects. 1900. p. 90 .....	A9.6:26
Entomology, economic, laboratory method of experimentation in. 1891. p. 266.....	A9.7:3
Woody plants, wounds in, pruning and care, principles of (Woods). p. 257.....	A1.10:895
See also Trees.	
Wool:	
American—	
future of (Newton). 1864. No. 1. p. 12.....	A27.9:2
note on. 1864. No. 6. p. 6.....	A27.9:2
Arabian trade in. p. 607 .....	A4.1:901
Australian, note on. 1873. p. 254 .....	A27.9:11
British imports, Jan.—March, 1868–69. p. 240 .....	A27.9:7
Buyers of, protection against. 1868. p. 247 .....	A27.9:6
Consumption of, estimate of, etc. 1867. pp. 16, 66.....	A27.9:5
Domestic, prices of, 1855–69. p. 46 .....	A27.9:8
Domestic and foreign. 1890. p. 283 .....	A27.9:28
Electoral, culture of, in South, facts relative to. 1878. p. 124...	A1.2:Sh3
Export of, from Montevideo in 1901. p. 607 .....	A4.1:901
German production and manufacture. 1876. p. 494 .....	A27.9:14
Germany's import (Stern). p. 520 .....	A4.1:899
Growing—	
Australia (Kenworthy). p. 204 .....	A1.1:864
California, 1854–74. p. 248 .....	A27.9:13
decrease of. 1869. p. 143 .....	A27.9:7
interest in United States. 1866. p. 66.....	A27.9:4
profits of, and future wool market. 1864. No. 1. p. 20.....	A27.9:3
test of. 1865. No. 6. p. 24 .....	A27.9:3
Uruguay (Loggin). 1870. p. 436 .....	A27.9:8
Hungary, industry. 1873. p. 191.....	A27.9:11
Industry in. 1887. p. 33 .....	A27.9:25
Production and prices of, Italy. 1895. p. 144 .....	A27.9:33
Kind of, most in demand. 1865. No. 2. p. 10.....	A27.9:3
Liverpool, trade. 1868. p. 35 .....	A27.9:6
On hand—	
Apr. 1867. p. 149 .....	A27.9:5
Apr. 1868. p. 185 .....	A27.9:6
Apr. 1869. p. 135 .....	A27.9:7
Popular fallacies concerning. 1867. p. 367 .....	A27.9:5
Prices of. 1867. p. 246 .....	A27.9:5
Production and consumption of. 1866. p. 297.....	A27.9:4
Production of, in United States in 1900. p. 589 .....	A4.1:900
Prospect in, 1867, note on. p. 334.....	A27.9:5
Railway charges for transportation of. 1896.....	A27.8:10
Retrospect. 1892. p. 175 .....	A27.9:30
Sheep's, substitutes for. See Alpaca.	
Silesian (Erdman). p. 521.....	A4.1:899
South American production. 1875. p. 525 .....	A27.9:13
Statistics of, in a nutshell, 1870–87. p. 354.....	A27.9:26
Trade in, 1867–68. p. 56.....	A27.9:7
United States, products. 1901.....	A4.1:901
World's clip of—	
1875. p. 94 .....	A27.9:14
1894. p. 121 .....	A27.9:32
1899. p. 671 .....	A4.1:899
1900. p. 591 .....	A4.1:900
See also Sheep and wool.	

# Index

	Classification no.
Wool and woollen mills, statistical report upon [statistics collected by the Department]. p. 505 .....	A1.1:864
Woolens, insects which attack, fumigation with bisulphide of carbon for complete and rapid destruction of (Du Bysson). 1893. p. 159	A9.7:6
Woolly aphis:	
California remedies for, note on. 1886. p. 43.....	A9.3:12
Of apple—	
circular relative to (Marlatt). 1897.....	A9.5:20
life history of, notes on (Alwood). 1898. p. 70.....	A9.6:17
<i>See also</i> Aphis.	
Wools and other animal fibers, examination of (McMurtrie). 1886.	A1.2:W88
Wools of United States. p. 187.....	A1.1:871
World's Agricultural Congress, 1893. <i>See</i> Chicago, Ill., World's Agricultural Congress.	
World's Columbian Exposition, 1893. <i>See</i> Chicago, Ill., World's Columbian Exposition.	
World's Industrial and Cotton Centennial Exposition. <i>See</i> New Orleans, La., World's Industrial and Cotton Exposition.	
World's markets for American products.....	A12.3:
Worms. <i>See</i> Angleworms—Armyworm—Bollworm—Cankerworms—Cottonworms—Cutworm—Stalkworm—Webworm.	
Worth, S. G. Cloud-burst at Erwin, Tenn. 1898. p. 244.....	A29.6:28
Worthington, Charles. <i>See</i> , for reports as Statistician, Agriculture Department, 1878–1880.....	A27.1:
Wounds of horses and their treatment (Michener). p. 447 .....	A4.2:H78
Wray, William H.:	
Great Britain, American animals and animal productions in. p. 440.....	A4.1:898
Horse trade with Great Britain. 1898. p. 50 .....	A1.2:H78
Horses, American thoroughbred, in England. p. 503 .....	A4.1:899
Live-stock trade from Argentina and Australia to England. p. 81.	A4.1:895–6
Wrecks. <i>See</i> Great Lakes.	
Wren, H. B. Climate and corn, report on, relation of. 1902. p. 8..	A29.6:29
Wright, Frank Bennett. Weather Bureau of Japan. 1900. p. 381.	A29.6:28
Wright, John A. C.:	
Address of, before convention of National League for Good Roads, Washington. 1893. p. 34.....	A10.3:14
Highway legislation in New York, history of. 1901. p. 29 .....	A22.3:21
Wright, M. Galveston, Tex., tornado, Nov. 6, 1892. p. 309.....	A29.6:20
Wurtemberg:	
Agricultural productions of. 1869–70. p. 206 .....	A27.9:10
Pomology in (Schickler). 1870. p. 153.....	A27.9:8
Wurtz, George B. Aerial observations. 1899. p. 114 .....	A29.3:24
Wyandotte, American breeds of fowls, 2 (McGrew). 1901 .....	A4.3:31
Wyoming:	
Agricultural resources of. p. 548 .....	A1.1:870
Agricultural survey of (Hoyt). 1893.....	A27.8:7
Cattle industry of (McNeely). p. 377.....	A4.1:898
Duty of water in (Johnston). 1900. p. 171.....	A10.3:86
Forest conditions of Rocky Mountains in (Ensign). p. 41.....	A13.3:2
Geology of, east of foothills of Rocky Mountains (Bailey). 1890, p. 65 .....	A15.2:Ar7
Irrigation in, use of water in, and its relation to ownership and distribution of natural supply (Buffum). 1900.....	A10.3:81
Irrigation system of (Bond and Wilson). 1901. p. 47 .....	A10.3:96
Live-stock industry of, condition of (McNeely). p. 425.....	A4.1:889–90
Prairie dog, from, description of new (Merriam). 1890. p. 33...	A5.5:4
Water supply of, for season of 1900, as depending on snowfall (Palmer). p. 498.....	A29.6:28
Weather Bureau, stations of, notes on (Abbe). 1900. p. 17 ....	A29.6:28
Windstorm in, local electricity in (Hunton). 1894. p. 509 .....	A29.6:22
<i>See also</i> Laramie Plains—Red Desert of Wyoming—Wheatland.	
Wyoming Experiment Station, recent investigations by, in alkali and irrigation (Buffum). 1900. p. 69 .....	A10.3:76
Xanthium strumarium. <i>See</i> Cocklebur.	
Xanthium trypetia, report on (Marlatt). 1891. p. 312.....	A9.7:3

	<b>Index</b>
	<b>Classification no.</b>
Xenia, or immediate effect of pollen in maize (Webber). 1900.....	A28.3:22
Xiphidium ensiferum, oviposition and embryonic development of, notes on (Wheeler). 1890. p. 222 .....	A9.7:2
Yakima area, Washington, soil survey of (Jensen and Olshausen). p. 389 .....	A26.5:901 <sup>1</sup>
Yakima Valley, Wash., irrigation in, use of water in (Waller). 1902. p. 241 .....	A10.3:104
Yakutat Bay, Alaska, botany of (Coville and Funston). 1895. p. 325 .....	A6.5:3
Yale. See Harvard and Yale.	
Yams in West Indies (Fairchild). 1899 .....	A6.4:21
Yardstick, value of the, note on (Abbe). 1897. p. 19 .....	A29.6:25
Yards, disinfection of, by fire (Stiles). 1902. p. 15 .....	A4.3:35
Yaupon, chemical notes on (Smith). 1872. p. 20 .....	A27.9:10
Yazoo area, Mississippi, soil survey of (Bonsteel and party). p. 359.	A26.5:901 <sup>1</sup>
Yearbooks of Agriculture Department:	A1.10:
Index to, 1894-1900 (Greathouse). 1902 .....	A21.3:7
Yellow-spotted willow-slug, report on (Howard). 1888. p. 33 .....	A9.7:1
Yellowstone National Park:	
Government road system of (Chittenden). 1901. p. 72 .....	A22.3:21
Letter relative to forest needs of (Hague). 1888. p. 206 .....	A13.3:2
Yellowstone Valley, alkali soils of, from preliminary investigation of soils near Billings, Mont. (Whitney and Means) .....	A26.3:14
Yerby, M. H., short biography of (Chaffee). 1900. p. 539 .....	A29.6:28
Yermoloff, Alexis. Phosphates, Russian mineral. 1873. p. 22 .....	A27.9:11
Yocum, J. H. Tannin, determining, by hide power, notes on points of error in shake method of. 1894. p. 204 .....	A7.3:43
Young, John A. Sheep husbandry in North Carolina. 1878. p. 115.	A1.2:Sh3
Young people attending farmers' institutes, how to interest and instruct (Spencer). 1902. p. 42 .....	A10.3:110
Yuba County, California, agricultural interest in. 1868. p. 457....	A27.9:6
Yuba River, California:	
Features and water rights of (Manson). 1901. p. 115 .....	A10.3:100
Use of water of (Connick). 1901. p. 100 .....	A10.3:100
Yuccas, geographic and vertical distribution of, in deserts and desert ranges of southern California, southern Nevada, northwest- ern Arizona, and southwestern Utah (Merriam). 1893. p. 345.	A5.5:7
Yucatan:	
Niin of, nature and uses. p. 268 .....	A1.1:868
Sisal-hemp industry in (Dodge). p. 49 .....	A11.5:3
Storm in, note on (Abbe). 1900. p. 155 .....	A29.6:28
Yucca insects and yucca pollination, further notes on (Riley). 1893. p. 300 .....	A9.7:5
Yucca pollination, notes on (Riley). 1889. p. 367 .....	A9.7:1
Yucca whipplei, pollination of, in California (Coquillett). 1893. p. 311 .....	A9.7:5
Yukon Valley:	
Agricultural and horticultural conditions in, preliminary report on (Jackson). 1898. p. 35 .....	A10.3:48
Agricultural possibilities of (Brainerd). p. 276 .....	A10.1 <sup>2</sup> :901
Yukon region:	
Birds of, with notes on other species (Bishop). 1900. p. 47 ....	A5.5:19
General account of (Osgood). 1900. p. 7 .....	A5.5:19
Mammals of (Osgood). 1900. p. 21 .....	A5.5:19
Meteorology of, report on (Myers). 1899. p. 100 .....	A29.6:27
Yukon Valley, weather of, report on (Myers). 1901. p. 309 .....	A29.6:29
Zabriskie, Rev. J. L. Water bug found by, note on (Bergroth). 1892. p. 321 .....	A9.7:4
Zamia, spermatogenesis and fecundation of (Webber). 1901 .....	A19.3:2
Zapus. See Jumping mice.	
Zebroids, breeding of. p. 369 .....	A4.1:898
Zehntner, L. Sugar-cane borers of Java. 1898. p. 32 .....	A9.6:10
Zeitler, J. N. Milk from Canstadt, report on. 1890. p. 153 .....	A7.3:24
Zinc in evaporated apples (Wiley). 1896 .....	A7.3:48
Zinc-iron method, determination of nitric nitrogen by (Shiver). 1894. p. 142 .....	A7.3:43

## Index

	Classification no.
Znaim cucumbers, cultivation of (Fairchild). 1901 .....	A23.4:2
Zones:	
Life and crop, of United States (Merriam). 1898 .....	A5.3:10
Verdant, notes on (Abbe). 1893. p. 365 .....	A29.6:21
Zoölogy:	
Abstracts of reports of agricultural experiment stations on, 1897-1902 .....	A10.6:
Medical and veterinary, index catalogue of. Pt. 1. Authors: A to Azevedo (Stiles and Hassall). 1902 .....	A4.3:39 <sup>1</sup>
<i>See also</i> Mammalogy.	
Zuntz, N. Metabolism of nutrients in animal body and source of muscular energy. 1897. p. 538 .....	A10.6:7
Zuyder-Zee, reclamation of. 1875. p. 455 .....	A27.9:13
Zyemstvos. <i>See</i> Russian zyemstvos.	

# APPENDIX

---

REPORTS WHICH ORIGINATED IN THE AGRICULTURE DEPARTMENT, BUT  
WHICH WERE PRINTED ONLY AS CONGRESSIONAL DOCUMENTS

## Appendix

- (1) 37th Cong., 3d sess., H. doc. 14; serial number 1159.  
Letter from Commissioner of Department of Agriculture, in answer to resolutions in regard to expenditure of agricultural fund. Dec. 18, 1862. 8 pp.  
(Contains statement of money paid for agricultural statistics, etc., July 1 to Dec. 5, 1862, and opinion of Attorney-General on transfer of unexpended appropriation and debts of Commissioner of Patents for agricultural purposes.)
- (2) 38th Cong., 1st sess., S. mis. doc. 13; serial number 1177.  
Letter of Commissioner of Agriculture to Chairman Committee on Agriculture upon subject of taxation of tobacco as recommended by Commissioner of Internal Revenue. January 21, 1864. 6 pp.  
(Shows reasons for dissent from proposition of Commissioner of Internal Revenue to tax leaf tobacco twenty cents per pound.)
- (3) 38th Cong., 2d sess., S. doc. 35; serial number 1209.  
Letter of Commissioner of Agriculture, transmitting report of commission appointed to test practicability of cultivating and preparing flax or hemp as substitute for cotton. March 1, 1865. 96 pp.
- (4) 39th Cong., 1st sess., H. doc. 49; serial number 1255.  
Reply of Commissioner of Agriculture to resolution relative to receipts and disbursements of that Department. February 21, 1866. 43 pp.  
(An itemized account of all receipts and disbursements of the Department from its inception, May 15, 1862, to Jan. 30, 1866.)
- (5) 39th Cong., 1st sess., S. mis. doc. 98; serial number 1239.  
Letter of Commissioner of Agriculture, communicating information in relation to rinderpest or cattle plague. April 18, 1866. 21 pp.  
(History of disease, remedies and courses of treatment advisable, and measures necessary to prevent its spread.)
- (6) 39th Cong., 1st sess., S. mis. doc. 103; serial number 1239.  
Communication from Commissioner of Agriculture relative to subject of curing seed and cultivating china grass. May 3, 1866. 5 pp.
- (7) 39th Cong., 1st sess., S. mis. doc. 124; serial number 1239.  
Letter of Commissioner of Agriculture to Chairman Committee on Agriculture, transmitting communication from Argentine Republic in reference to purchase by our Government of flock of alpacas. July 5, 1866. 3 pp.
- (8) 40th Cong., 2d sess., H. doc. 55; serial number 1330.  
Letter from Commissioner of Agriculture in answer to resolution relative to allowance of twenty per cent for last fiscal year. December 16, 1867. 1 p.
- (9) 40th Cong., 2d sess., H. doc. 91; serial number 1332.  
Report of Commissioner of Agriculture in response to House resolution. January 13, 1868. 11 pp.  
(Report on condition of Department, and legislation necessary for reorganization in keeping with its vast interests.)
- (10) 40th Cong., 2d sess., H. doc. 121; serial number 1337.  
Letter from Commissioner of Agriculture relative to duty on importations of foreign stock. January 27, 1868. 2 pp.
- (11) 40th Cong., 2d sess., H. doc. 188; serial number 1337.  
Letter from Commissioner of Agriculture, transmitting memorial of Tennessee Horticultural Society for removal of import duties on agricultural seeds, etc., and approving same. February 25, 1868. 2 pp.
- (12) 40th Cong., 3d sess., H. doc. 93; serial number 1381.  
Letter from Commissioner of Agriculture relative to proposed international horticultural exhibition to be held at Hamburg Sept., 1869. February 24, 1869. 3 pp.
- (13) 41st Cong., 2d sess., H. ex. doc. 107; serial number 1417.  
Letter from Commissioner of Agriculture in answer to resolution in relation to extent and value of foreign commodities susceptible of production within limits of country, as plants useful for dye-stuffs, medicines, and for other economic purposes. February 3, 1870. 5 pp.  
(Letter includes table showing amount and value of articles imported at New York City, 1869, and their products.)



- (14) 42d Cong., 3d sess., H. ex. doc. 34; serial number 1565.  
Letter from Commissioner of Agriculture, transmitting list of articles purchased and disposed of by his department since inventory made December 1, 1871. December 10, 1872. 2 pp.
- (15) 42d Cong., 2d sess., H. ex. doc. 17; serial number 1509.  
Letter from Commissioner of Agriculture relative to inventory and accounts of property of U. S. in public buildings and grounds. December 11, 1871. 2 pp.
- (16) 42d Cong., 2d sess., S. mis. doc. 144; serial number 1482.  
Letter from Commissioner of Agriculture, communicating, in compliance with resolution, statement of statistics of wools and woolens, showing importation and domestic production thereof. April 24, 1872. 6 pp.
- (17) 44th Cong., 1st sess., S. mis. doc. 75; serial number 1665.  
Letter from Commissioner of Agriculture, transmitting, in answer to resolution, information in relation to soil and climate adapted to growth of sea-island cotton. March 10, 1876. 3 pp.
- (18) 44th Cong., 1st sess., S. mis. doc. 75, pt. 2; serial number 1665.  
Letter from Commissioner of Agriculture, communicating, in answer to resolution, additional information in relation to cultivation of sea-island cotton. March 20, 1876. 2 pp.
- (19) 45th Cong., 2d sess., H. ex. doc. 24; serial number 1802.  
Message from President of United States, transmitting special report upon subject of forestry by Commissioner of Agriculture. December 14, 1877. 3 pp.  
(A short review of "Report on Forestry, by Franklin B. Hough.")
- (20) 45th Cong., 2d sess., S. ex. doc. 35; serial number 1780.  
Message from President of the United States, communicating, in answer to resolution, information in relation to disease prevailing among swine and other domestic animals. February 28, 1878. 149 pp.
- (21) 45th Cong., 3d sess., S. mis. doc. 71; serial number 1833.  
Letter from Commissioner of Agriculture to Chairman Committee on Agriculture, communicating information on subject of pleuro-pneumonia among cattle. February 15, 1879. 22 pp.  
(Consists of many letters from men interested, history of disease and preventive measures adopted here and abroad.)
- (22) 47th Cong., 1st sess., H. mis. doc. 30; serial number 2046.  
Communication from Commissioner of Agriculture relative to establishment of "Experiment Station" in District of Columbia. February 1, 1882. 6 pp.  
(Letters showing advantages to foreign countries of experiment stations and our need for them.)
- (23) 47th Cong., 1st sess., H. mis. doc. 39; serial number 2046.  
Letter from Commissioner of Agriculture, in response to resolution, relative to growth of cinchona in United States. May 17, 1882. 3 pp.
- (24) 47th Cong., 2d sess., S. mis. doc. 51; serial number 2083.  
Investigation of scientific and economic relations of sorghum-sugar industry, by Committee of National Academy of Sciences. November, 1882. Washington, Government Printing Office, 1883. 152 pp.  
(Contains: Report of committee; conclusion and summary; and appended papers: So-called Chinese sugar cane, by S. Wells Williams; Sorghum, by Louis Vilmorin; Sorghum, by Leonard Wray; Sorghum and some conclusions as to value as source of sugar, by Peter Collier; Statistics of sorghum, by J. R. Dodge; Sorghum sugar cane; Rio Grande Sugar Co., New Jersey; Champaign Sugar and Glucose Mfg. Co., Champaign, Ill.; Experiments in amber cane at Madison, Wisconsin; Experiments with sorghum canes, by Magnus Swenson; Varieties of cane grown for experiments, by W. A. Henry; Manufacture of sugar, sirup, and glucose from sorghum, by Henry H. Weber and Melville A. Scovell; Letters; and Bibliography.)
- (25) 48th Cong., 1st sess., S. ex. doc. 137; serial number 2167.  
Letter from Commissioner of Agriculture, transmitting, in answer to resolution, statement of amount of certain grains produced in United States during certain periods, and their disposition. March 25, 1884. 12 pp.

## Appendix

- (26) 48th Cong., 2d sess., H. ex. doc. 46; serial number 2296.

Letter from Commissioner of Agriculture, transmitting list of persons employed and statement of expenditures and of means adopted for suppression of contagious and infectious diseases among domestic animals. December 18, 1884. 8 pp.

- (27) 49th Cong., 1st sess., H. mis. doc. 154; serial number 2415.

Letter from Commissioner of Agriculture, transmitting statement of expenditures for fiscal year ended June 30, 1885. March 17, 1886. 43 pp.

- (28) 49th Cong., 1st sess., H. mis. doc. 240; serial number 2418.

Letter from Commissioner of Agriculture, transmitting, in response to resolution, statement showing amount expended for chemical division in laboratory from appropriation for present fiscal year and balance unexpended. April 27, 1886. 4 pp.

- (29) 49th Cong., 1st sess., H. mis. doc. 284; serial number 2418.

Letter from Commissioner of Agriculture, transmitting certain papers, in response to resolution calling for copy of Department circular of June 6, 1882; copy of award of committee appointed to carry provisions of circular into effect; copies of all correspondence with Delaware Beet-Sugar Co. on subject, and statement of awards paid and to whom. May 14, 1886. 6 pp.

(Circular offers awards to manufacturers of sorghum and beet sugar for best reports on methods used.)

- (30) 49th Cong., 1st sess., H. mis. doc. 303; serial number 2488.

Letter from Acting Commissioner of Agriculture, transmitting, in response to resolution, report by statistician of Department respecting supply and domestic requirement of wheat and corn, and acreage of wheat, for present year, as compared with past five years; also probable requirements of importing countries and acreage of crop and probable surplus or shortage in exporting countries for ensuing year. June 1, 1886. 11 pp.

- (31) 49th Cong., 2d sess., H. mis. doc. 20; serial number 2488.

Letter from Commissioner of Agriculture, transmitting report of expenditures for fiscal year ended June 30, 1886. December 14, 1886. 42 pp.

- (32) 50th Cong., 1st sess., S. ex. doc. 24; serial number 2504.

Letter from Commissioner of Agriculture in response to resolution relative to employes obtaining patents for process of sugar making. December 13, 1887. 5 pp.

(Letter in restraint of allowing patents to Magnus Swenson, and opinion of Attorney-General.)

- (33) 50th Cong., 1st sess., H. mis. doc. 122; serial number 2565.

Letter from Commissioner of Agriculture, transmitting statement of expenditures for fiscal year ended June 30, 1887. January 18, 1888. 81 pp.

- (34) 50th Cong., 1st sess., S. ex. doc. 68; serial number 2510.

Letter from Commissioner of Agriculture, transmitting, in response to resolution, report of Professor Swenson on sorghum sugar. February 6, 1888. 11 pp.

- (35) 50th Cong., 1st sess., S. ex. doc. 69; serial number 2510.

Letter from Commissioner of Agriculture, transmitting report for 1887 of Bureau of Animal Industry. February 6, 1888. 75 pp.

- (36) 50th Cong., 2d sess., S. mis. doc. 29; serial number 2614.

Letter of Commissioner of Agriculture, transmitting report of Joseph Neumann of result of his study and experiments of wild native silkworm of California. January 5, 1889. 5 pp.

- (37) 50th Cong., 2d sess., H. mis. doc. 62; serial number 2654.

Letter from Commissioner of Agriculture, transmitting report for 1888 of Bureau of Animal Industry. January 9, 1889. 116 pp.

- (38) 50th Cong., 2d sess., H. mis. doc. 135; serial number 2654.

Letter from Commissioner of Agriculture, transmitting report of Women's Silk Culture Association of United States for fiscal year 1888. March 2, 1889. 4 pp.

- (39) 51st Cong., 1st sess., S. ex. doc. 24; serial number 2682.

Letter of Secretary of Agriculture, transmitting report of operations of Bureau of Animal Industry for year 1889. January 8, 1890. 74 pp.

## Appendix

- (40) 51st Cong., 1st sess., H. ex. doc. 104; serial number 2741.  
Letter from Secretary of Agriculture, transmitting statement of expenditures for fiscal year ended June 30, 1889. January 13, 1890. 98 pp.
- (41) 51st Cong., 1st sess., H. ex. doc. 110; serial number 2743.  
Letter from Secretary of Agriculture, transmitting reports upon operations of Women's Silk Culture Association of United States and of Ladies' Silk Culture Society of California, and upon experiments made in District of Columbia with silk-reeling machinery. January 16, 1890. 30 pp.  
(Includes also report of Joseph Neumann.)
- (42) 51st Cong., 1st sess., H. ex. doc. 423; serial number 2752.  
Communication from Acting Secretary of Agriculture, in reference to deficiency in appropriation for North Dakota Agricultural Experiment Station, and stating that said appropriation should be made. June 21, 1890. 1 p.
- (43) 51st Cong., 1st sess., S. mis. doc. 179; serial number 2700.  
Letter of Secretary of Agriculture, transmitting synopsis of report which the Department of Agriculture will make upon subject of irrigation by artesian wells. July 1, 1890. 7 pp.  
(This is a short synopsis of (A15.2:Ar7).)
- (44) 51st Cong., 2d sess., H. ex. doc. 35; serial number 2855.  
Letter from Secretary of Agriculture, transmitting statement of expenditures of all appropriations for fiscal year ended June 30, 1890. December 3, 1890. 95 pp.
- (45) 51st Cong., 2d sess., S. ex. doc. 8; serial number 2818.  
Letter from Secretary of Agriculture, transmitting report of Bureau of Animal Industry [for year 1890]. December 11, 1890. 104 pp.
- (46) 51st Cong., 2d sess., S. ex. doc. 53, pt. 2; serial number 2818.  
Letter from Secretary of Agriculture, transmitting, in additional response to resolution, report of progress of irrigation in months of November and December. January 20, 1891. 14 pp. 12 folded pl.
- (47) 51st Cong., 2d sess., H. ex. doc. 203; serial number 2863.  
Letter from Secretary of Agriculture, transmitting statement of all purchases of cocoons and all sales of silk and silk waste during fiscal year ending June 30, 1890; also reports of Ladies' Silk Culture Society of California and Women's Silk Culture Association of United States. January 24, 1891. 25 pp.
- (48) 52d Cong., 1st sess., S. ex. doc. 11; serial number 2892.  
Letter from Secretary of Agriculture, transmitting report of Bureau of Animal Industry for year 1891. December 22, 1891. 129 pp.
- (49) 52d Cong., 1st sess., H. ex. doc. 55; serial number 2953.  
Letter from Secretary of Agriculture, transmitting detailed statement of all expenditures of appropriations for year ending June 30, 1891. January 7, 1892. 134 pp.
- (50) 52d Cong., 1st sess., S. ex. doc. 45; serial number 2900.  
Letter from Secretary of Agriculture, in response to resolution, transmitting report of agent of Department of Agriculture for making experiments in production of rainfall. February 25, 1892. 59 pp. 9 pl.
- (51) 52d Cong., 1st sess., S. ex. doc. 75; serial number 2900.  
Letter from Secretary of Agriculture, in response to resolution, relative to certain employes in Department. April 12, 1892. 5 pp.
- (52) 52d Cong., 2d sess., S. ex. doc. 20; serial number 3056.  
Letter from Secretary of Agriculture, transmitting annual report of Bureau of Animal Industry for 1892. January 5, 1893. 229 pp.
- (53) 52d Cong., 2d sess., H. ex. doc. 251; serial number 3107.  
Letter from Secretary of Agriculture, transmitting statement showing expenditure of appropriation for experiments in manufacture of sugar. March 2, 1893. 3 pp.
- (54) 53d Cong., 2d sess., H. ex. doc. 14; serial number 3223.  
Letter from Secretary of Agriculture, transmitting detailed statement of expenditures of all appropriations for fiscal year ending June 30, 1893. December 5, 1893. 208 pp.

## Appendix

- (55) 53d Cong., 2d sess., S. ex. doc. 72; serial number 3160.  
Letter from Secretary of Agriculture, in response to resolution, relative to wheat crop of United States. April 4, 1894. 2 pp.
- (56) 53d Cong., 2d sess., S. ex. doc. 125; serial number 3163.  
Letter from Secretary of Agriculture, in response to resolution, calling for statement of visible and invisible supply of wheat likely to be in United States on July 1, 1894, and other information concerning crops for 1894. June 29, 1894. 2 pp.
- (57) 53d Cong., 2d sess., S. ex. doc. 172; serial number 3163.  
Letter from Secretary of Agriculture, in response to resolution, transmitting information in relation to investigations and experiments in planting native pine seed for growth of native pine in sand hills of the Northwest, and other information called for in resolution. August 2, 1894. 14 pp.  
(Contains extract from report of Forestry Division, 1892, on forest-planting experiments in Nebraska.)
- (58) 53d Cong., 3d sess., H. ex. doc. 8; serial number 3319.  
Letter from Secretary of Agriculture, transmitting detailed statement of expenditures for fiscal year ending June 30, 1894. December 3, 1894. 180 pp.
- (59) 53d Cong., 3d sess., S. ex. doc. 69; serial number 3280.  
Letter from Secretary of Agriculture, in response to resolution, transmitting information in relation to machinery and other materials furnished by General Government and used for experimenting in manufacture of sugar. February 12, 1895. 6 pp.
- (60) 54th Cong., 1st sess., H. doc. 25; serial number 3390.  
Letter from Secretary of Agriculture, transmitting detailed statement of expenditures of all appropriations for fiscal year ended June 30, 1895, including supplemental account to date. December 6, 1895. 189 pp.
- (61) 54th Cong., 1st sess., H. doc. 208; serial number 3420.  
Letter from Secretary of Agriculture, replying to resolution relating to efficiency of employees in certain Executive Departments. February 6, 1896. 1 p.
- (62) 54th Cong., 1st sess., S. doc. 248; serial number 3354.  
Letter from Secretary of Agriculture in response to resolution directing Secretary of Agriculture to immediately communicate to Senate reasons for delay in supplying seeds for distribution. May 8, 1896. 2 pp.
- (63) 54th Cong., 1st sess., S. doc. 267; serial number 3354.  
Letter from Acting Secretary of Agriculture relating to bill for further prevention of cruelty to animals in District of Columbia. May 20, 1896. 6 pp.
- (64) 54th Cong., 2d sess., H. doc. 232; serial number 3524.  
Letter from Secretary of Agriculture, replying to resolution, requesting information relating to production and export of castor beans. January 30, 1897. 1 p.
- (65) 54th Cong., 2d sess., H. doc. 275; serial number 3534.  
Letter from Secretary of Agriculture, transmitting, in response to resolution, statement as to employees in Department. February 9, 1897. 162 pp.
- (66) 54th Cong., 2d sess., S. doc. 155; serial number 3471.  
Letter from Secretary of Agriculture, communicating, in response to resolution, information relative to removal of certain employees in Bureau of Animal Industry at South Omaha. February 25, 1897. 13 pp.
- (67) 55th Cong., 1st sess., S. doc. 112; serial number 3562.  
Letter from Secretary of Agriculture, in regard to bill entitled "A bill for further prevention of cruelty to animals in District of Columbia." May 26, 1897. 8 pp.
- (68) 55th Cong., 2d sess., H. doc. 26; serial number 3651.  
Letter from Secretary of Agriculture, transmitting detailed statement of expenditures of all appropriations for fiscal year ending June 30, 1897. December 6, 1897. 218 pp.
- (69) 55th Cong., 2d sess., S. doc. 63; serial number 3592.  
Letter from Secretary of Agriculture, in response to resolution, relative to sugar importation, production, and consumption in United States. January 17, 1898. 4 pp.

- (70) 55th Cong., 2d sess., H. doc. 309; serial number 3679.  
[Letter from Secretary of Agriculture, transmitting report on] adulteration of wheat flour. February 16, 1898. 42 pp.
- (71) 55th Cong., 3d sess., H. doc. 23; serial number 3768.  
Letter from Secretary of Agriculture, transmitting detailed statement of expenditures of all appropriations for fiscal year ending June 30, 1898, including supplemental accounts to date. December 5, 1898. 214 pp.
- (72) 55th Cong., 3d sess., H. doc. 181; serial number 3813.  
Report upon forestry investigations of Department of Agriculture, 1877-1898; by B. E. Fernow. Washington, Government Printing Office. 1899. 401 pp. 32 pl. 4°.  
(Contains: Memorial of committee, American Association for Advancement of Science, in behalf of forest preservation, leading to establishment of Division of Forestry; List of publications relating to forestry issued from Department of Agriculture since 1877; Forests and forestry in United States; Forest policies of European nations; Forest conditions and methods of foreign management in Germany, with brief account of forest management in British India; Principles of silviculture; Principles of forest economy; Forest influences; Work in timber physics in Division of Forestry, by Filibert Roth; Metal ties for railways and economies in use of wooden ties, by E. E. Russell Tratman.)
- (73) 55th Cong., 3d sess., S. doc. 124; serial number 3735.  
Message from President of United States, transmitting, in response to resolution, report of Secretary of Agriculture, regarding usefulness of reservoirs to agriculture in irrigated regions of the United States. February 18, 1899. 14 pp.
- (74) 56th Cong., 1st sess., H. doc. 173; serial number 3929.  
Letter from Acting Secretary of Agriculture, presenting detailed statement of expenditures of all appropriations for fiscal year ending June 30, 1899. December 13, 1899. 234 pp.
- (75) 56th Cong., 1st sess., S. doc. 81; serial number 3850.  
Letter from Secretary of Agriculture, in response to resolution, relative to expenditure of \$50,000,000 appropriated by Congress [to supply urgent deficiencies in appropriations for fiscal year ending June 30, 1898, and for prior years, and for other purposes]. January 16, 1900. 1 p.
- (76) 56th Cong., 1st sess., H. doc. 500; serial number 3929.  
Message from President of United States, transmitting report of Secretary of Agriculture on work and expenditures of agricultural experiment stations for fiscal year ended June 30, 1899. March 8, 1900. 111 pp.
- (77) 56th Cong., 1st sess., S. doc. 277; serial number 3868.  
Letter from Secretary of Agriculture, transmitting, in response to resolution, statement showing number of persons employed in Department of Agriculture, between certain ages. April 10, 1900. 2 pp.
- (78) 56th Cong., 2d sess., H. doc. 29; serial number 4116.  
Letter from Secretary of Agriculture, presenting detailed statement of expenditures for year ending June 30, 1900. December 3, 1900. 247 pp.
- (79) 56th Cong., 2d sess., H. doc. 192; serial number 4148.  
Letter from Secretary of Agriculture, relating to printing report on investigations of agricultural resources and capabilities of Porto Rico. December 13, 1900. 1 p.
- (80) 56th Cong., 2d sess., S. doc. 108; serial number 4033.  
Irrigation investigations in California, under direction of Elwood Mead, assisted by William E. Smythe, Marsden Manson, J. M. Wilson, Charles D. Marx, Frank Soulé, C. E. Grunsky, Edward M. Boggs, and James D. Schuyler. January 24, 1901. Washington, Government Printing Office, 1901. 73 pp.
- (81) 57th Cong., 1st sess., S. doc. 181; serial number 4234.  
Tabulated statement prepared by Agricultural Department, for Senate Committee on Manufactures, showing adulteration of most common articles of food consumed in United States. February 11, 1902. Washington, Government Printing Office, 1902. 19 pp.

## **Appendix**

(82) 57th Cong., 1st sess., S. doc. 377; serial number 4245.

Letter from Secretary of Agriculture, transmitting detailed statement showing location, annual rental, etc., of quarters occupied by Department of Agriculture. May 29, 1902. 4 pp.

(83) 57th Cong., 1st sess., H. doc. 29; serial number 4301.

Letter from Secretary of Agriculture, transmitting detailed statement of expenditures of all appropriations for fiscal year ending June 30, 1901, including supplemental accounts to October 14, inclusive. December 2, 1901. 274 pp.

(84) 57th Cong., 1st sess., S. doc. 24; serial number 4220.

Report of Secretary of Agriculture in response to resolution, giving data regarding number of employees, ages, and salaries of each in his Department. December 4, 1901. 33 pp.



# INDEX TO APPENDIX

	Entry no.		Entry no.
Adulteration, food .....	81	Imports.....	10, 13, 16
Ages of employees.....	77, 84	Internal-revenue tax.....	2
Agriculture Department .....	9	Irrigation .....	43, 46, 73, 80
Alpacas, flock of .....	7	Ladies' Silk Culture Society of California..	41, 47
Amber cane .....	24	Machinery.....	41
American Association for Advancement of Science.....	72	Madison, Wis.....	24
Animal Industry Bureau....	35, 37, 39, 45, 48, 52, 66	Manson, Marsden .....	80
Animals.....	20, 26, 63, 67	Marx, Charles D.....	80
Argentine Republic .....	7	Mead, Elwood .....	80
Artesian wells.....	43	Medicines .....	13
Attorney-General, opinion .....	1, 32	National Academy of Sciences .....	24
Beans, castor.....	64	Nebraska .....	57, 66
Beet sugar.....	29	Neumann, Joseph .....	36, 41
Bibliography of sorghum.....	24	New York City .....	13
Boggs, Eduard M.....	80	North Dakota.....	42
British India, forests .....	74	Northwest, the .....	57
California .....	36, 41, 47, 80	Office quarters.....	82
Castor beans.....	64	Omaha, Nebr.....	66
Cattle .....	21	Patents.....	32
Cattle plague.....	5	Patents, Commissioner of.....	1
Champaign Sugar and Glucose Manufac- turing Company, Champaign, Ill .....	24	Physics, timber.....	72
Chemical Division.....	28	Pine trees .....	57
China grass.....	6	Plants .....	18
Chinese sugar cane.....	24	Pleuro-pneumonia .....	21
Cinchona.....	23	Porto Rico.....	79
Cocoons .....	47	Property in public buildings.....	15
Collier, Peter.....	24	Public buildings, property.....	15
Corn.....	80	Purchases .....	14
Cotton.....	8, 17, 18	Quarters, office.....	82
Crops.....	55, 56	Railway ties.....	72
Cruelty to animals .....	63, 67	Rainfall .....	50
Deficiencies .....	42, 75	Receipts, 1862-1865.....	4
Delaware Beet Sugar Company .....	29	Reservoirs .....	78
Disbursements. See Expenditures.		Rinderpest .....	5
Diseases, animal.....	20, 26	Rio Grande Sugar Company, New Jersey ..	24
District of Columbia.....	22, 41, 63, 67	Schuyler, James D.....	80
Dodge, J. R.....	24	Scovell, Melville A.....	24
Domestic animals .....	20, 26	Sea-island cotton.....	17, 18
Duty on imports.....	10	Seeds .....	11, 62
Dyestuffs .....	13	Silk .....	38, 41, 47
Employees .....	51, 61, 65, 77, 84	Silk worm .....	36
Europe, forest policies.....	72	Silviculture .....	72
Expenditures.....	1, 4, 27, 31, 83, 40, 44, 49, 54, 58, 60, 68, 71, 74, 78, 83	Sirup .....	24
Experiment stations.....	22, 42, 76	Smythe, William E.....	80
Fernow, B. E.....	72	Sorghum sugar.....	24, 29, 34
Flax.....	3	Soulé, Frank.....	80
Flour, wheat .....	70	Statistics, agricultural.....	1
Food adulteration.....	81	Sugar.....	24, 32, 53, 59, 69
Forestry .....	19, 57, 72	Swenson, Magnus .....	24, 32, 34
Forestry Division.....	72	Swine .....	20
Germany, forests .....	72	Tennessee Horticultural Society.....	11
Glucose.....	24	Tobacco, leaf.....	2
Grain .....	25	Tratman, E. E. Russell.....	72
Grass, China.....	6	Twenty per cent allowance.....	8
Grunsky, C. E.....	80	Vilmorin, Louis.....	24
Hamburg.....	12	Weber, Henry H.....	24
Hemp.....	3	Wells, artesian .....	43
Henry, W. A.....	24	Wheat.....	30, 55, 56
Horticulture.....	12	Wheat flour .....	70
Hough, Franklin B.....	19	Williams, S. Wells.....	24
		Wilson, J. M.....	80
		Women's Silk Culture Assn. of U. S.....	38, 41, 47
		Wools and woolens.....	16



Reg. 718194  
BIBLIOGRAPHY OF UNITED STATES PUBLIC DOCUMENTS

Department List No. 1.

# LIST OF PUBLICATIONS

OF THE

# AGRICULTURE DEPARTMENT

1862-1902

WITH ANALYTICAL INDEX

Prepared in the Office of the  
SUPERINTENDENT OF DOCUMENTS  
GOVERNMENT PRINTING OFFICE

WASHINGTON  
GOVERNMENT PRINTING OFFICE

1904









